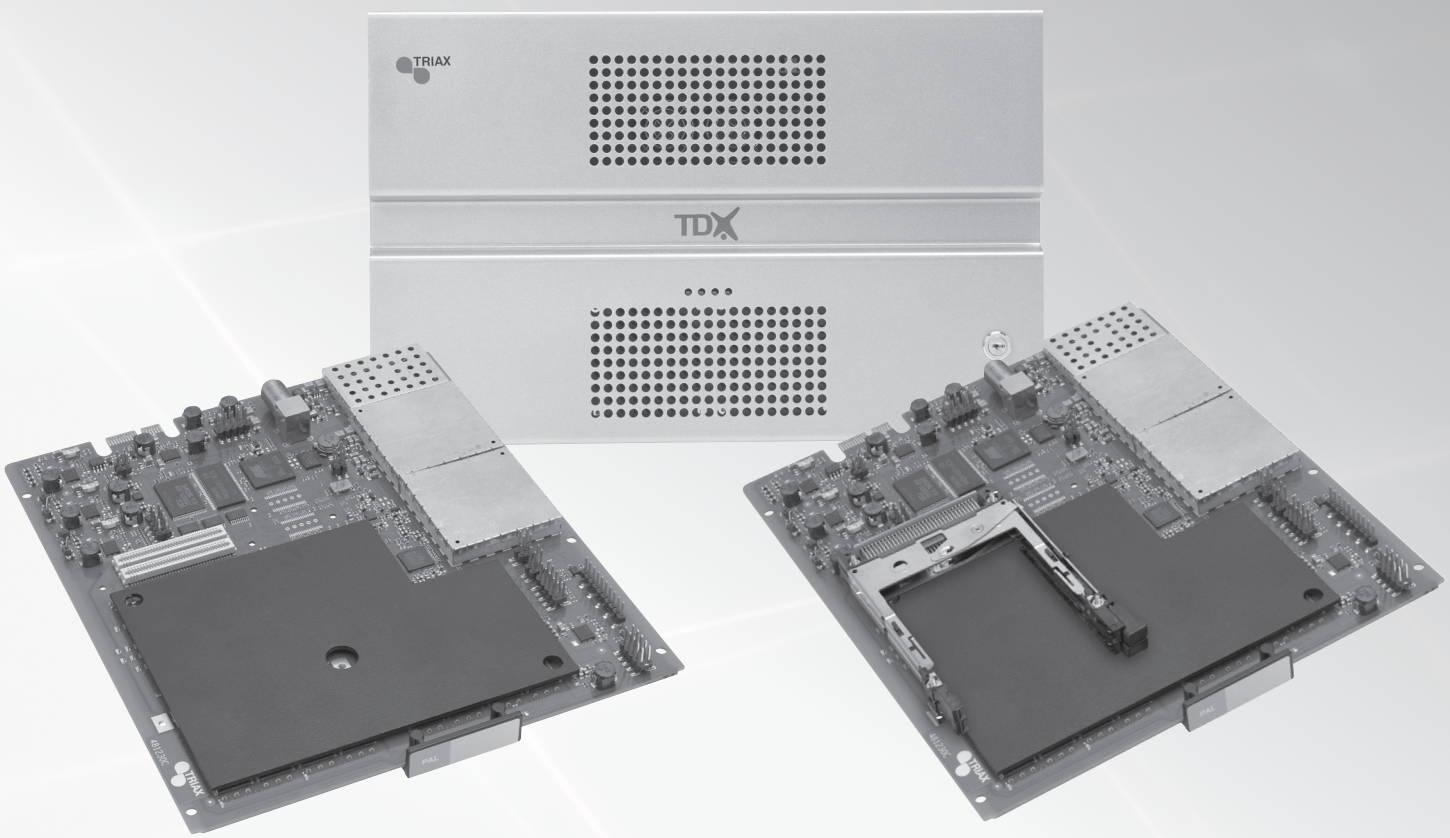

User guide

891075 **| GB |**

PAL module - 492050/492051

TRIAX - your ultimate connection

Rev. 04 - 2011 - A

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Disposal

Within in the European Union this label indicates that the product cannot be disposed of with the general household waste. Neither the headend nor the input and output modules can be disposed of with the general household waste.

For proper treatment and recycling of old products, please take them to designated collection points in accordance with your national legislation.

Box content

A new output module is wrapped in antistatic bubble wrap and packed in a cardboard box when you receive it.

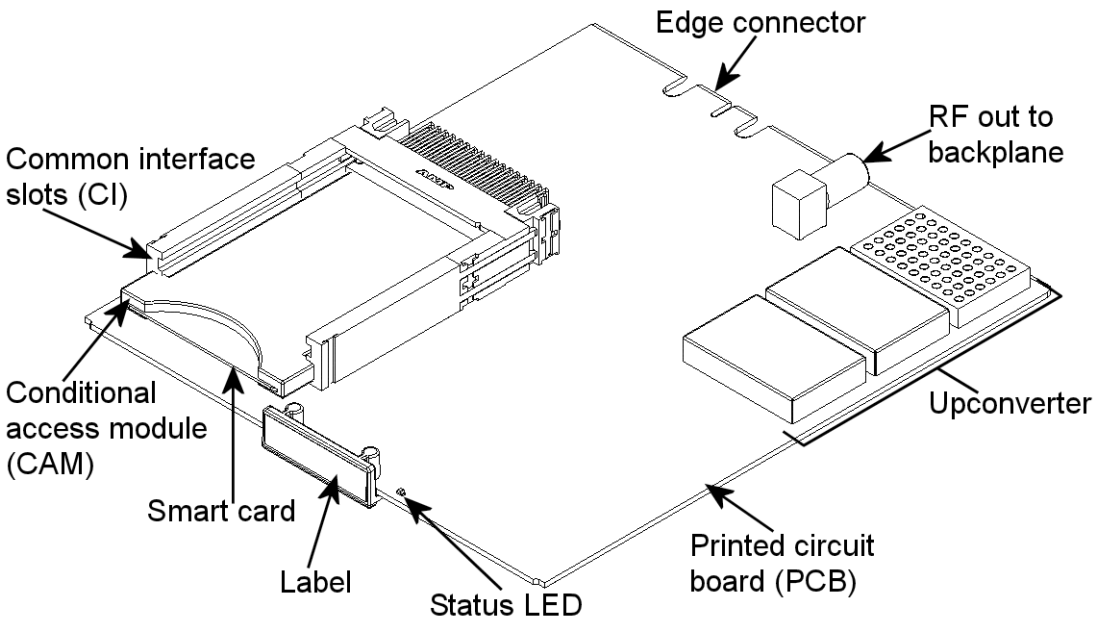
Included in the box is a user guide instructing you in how to use the TDX Service Tool to configure the module.

PAL module

The PAL output module is one of the output modules that you can install in the output section of your TDX headend unit.

The PAL output module is available in two versions, one version with Common Interface (CI) and one without.

Below you can see an illustrated description of a PAL module with CI slots.



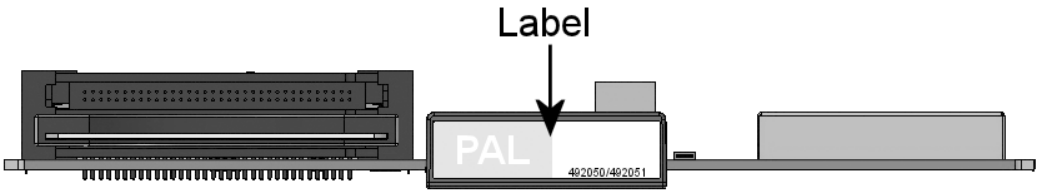
Basics

Labels

A label is placed on the output module where you can write the information regarding the configuration of the module.

Besides the information that you write on the label, the module type and part number are also displayed on the label.

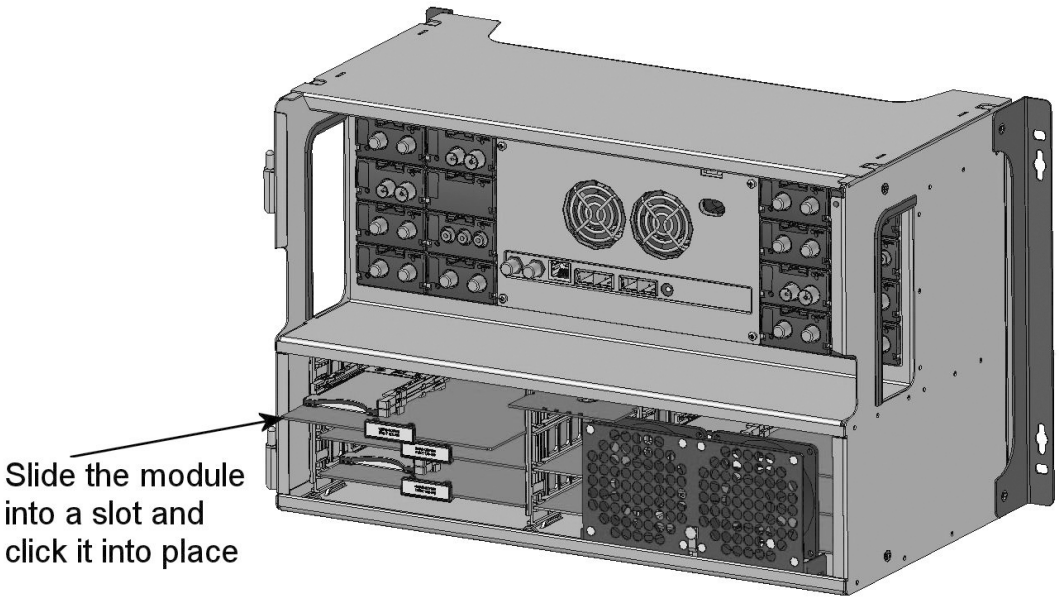
Note The coloured part at the top of the label also informs you of the module type. Each type of module is allocated a different coloured label.



On one of the other sides of the module you will find a label with a bar code printed on it.

Module installation

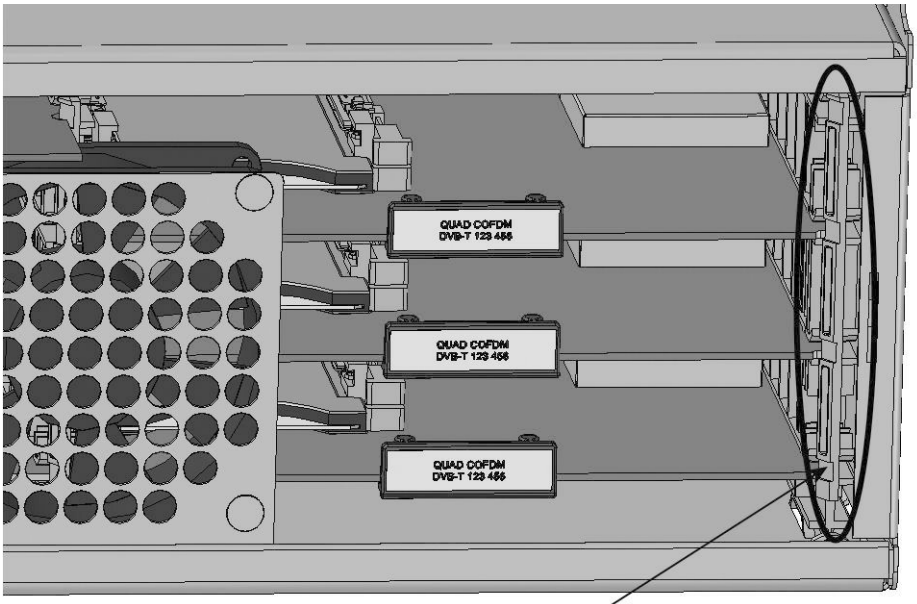
You install an output module by sliding the module into a module slot in the lower section of the headend unit and click it into place.



Module removal

You release an output module from a slot by using the lock mechanism that is placed to the right of the modules in the output section.

Move the lock mechanism slightly to release the module.

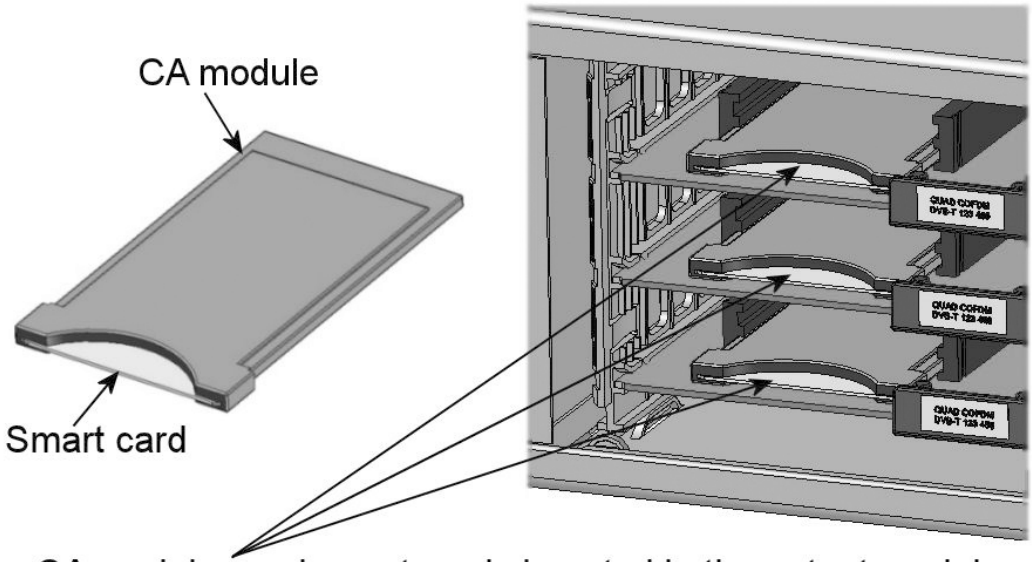


To take a module out of a slot in the output section,
tip the lock mechanism and then pull the module out

CAM/Smart card

You can insert 2 Conditional Access modules (CA) into each of those output modules that have Common Interface (CI) slots.

Each CA module is able to unscramble at least one service. Which services depend on the service provider of the CA module and smart card.



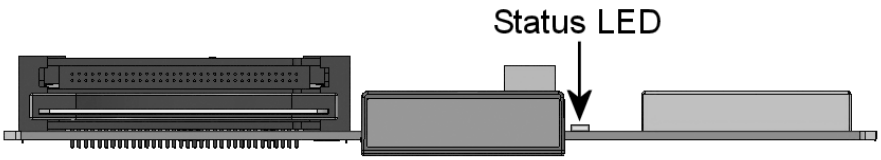
CA modules and smart cards inserted in the output modules

Basics

Status LED's

There is a status LED on the front of each module. The LED indicates whether the module functions according to its purpose or fails.

Green - flashing	The module has not been configured yet.
Green	No errors and everything is valid.
Red	Error.
No colour	Power has not been switched on.

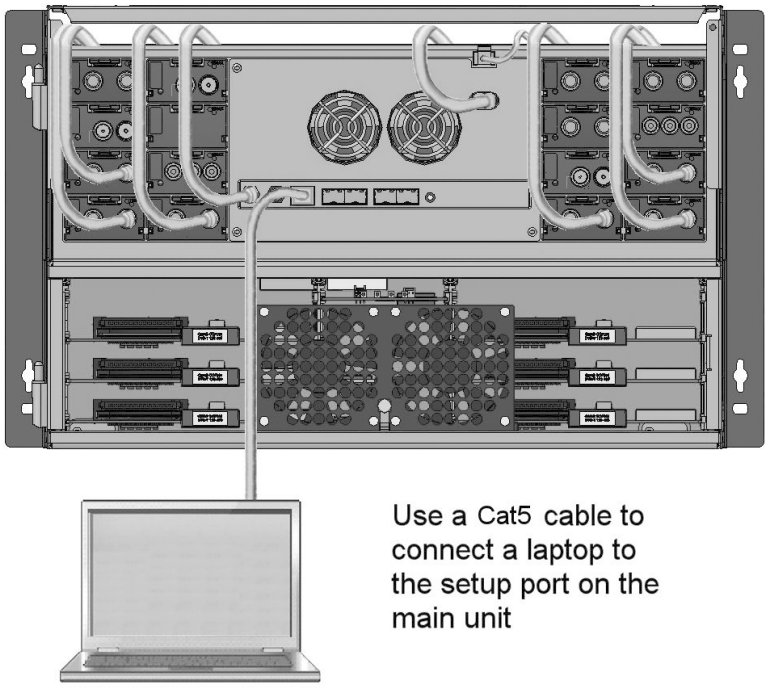


When you update the software of a module the status LED provides you with information about the updating process.

Orange	Boot loader state.
Temporary off	Initiation of the software update.
Temporary green	Every time the modules receives a valid data package. Repeated until the update is completed without errors.
Red	Software update failed.

Configuration of system

In order to set up and configure the input and output modules within the headend system you have to connect your laptop (Windows based) to the RJ45 socket on the main headend unit using a Cat5 cable.



The Triax TDX Digital Headend system uses the programmes below and in addition to access the TDX Service Tool Microsoft© Silverlight Runtime version 3.0 is required.

Recommendations:
Operating system: Windows XP or above.

Browser: Windows Internet Explorer version 6.0 or above.

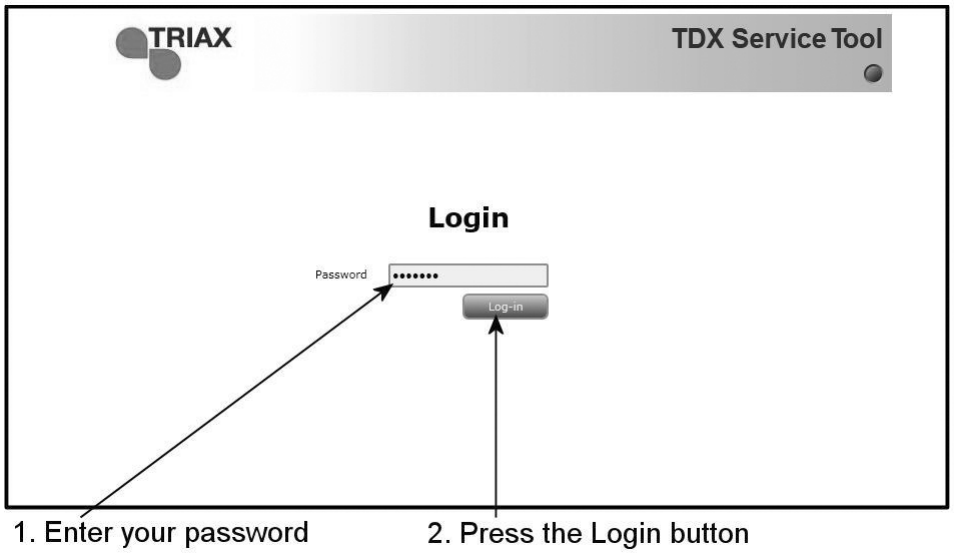
Additional software: Microsoft© Silverlight Runtime version 3.0 or above.

To access the TDX Service Tool, open your web browser on your laptop and input the following IP address in the web address bar **http://192.168.0.100** and press enter.

Note Your laptop has to use a static IP address in order to access the TDX Service Tool using the above mentioned IP address.

Log in

When you have loaded the TDX Service Tool from your TDX headend system to your laptop/computer the Login window of TDX Service Tool is displayed.



The first time you want to log in to your TDX headend system you have to enter the default password. The default password is: **triax1234**

You can change the default password as soon as you have logged in to your headend system. For more information about changing passwords, see “Administration window” on page 9.

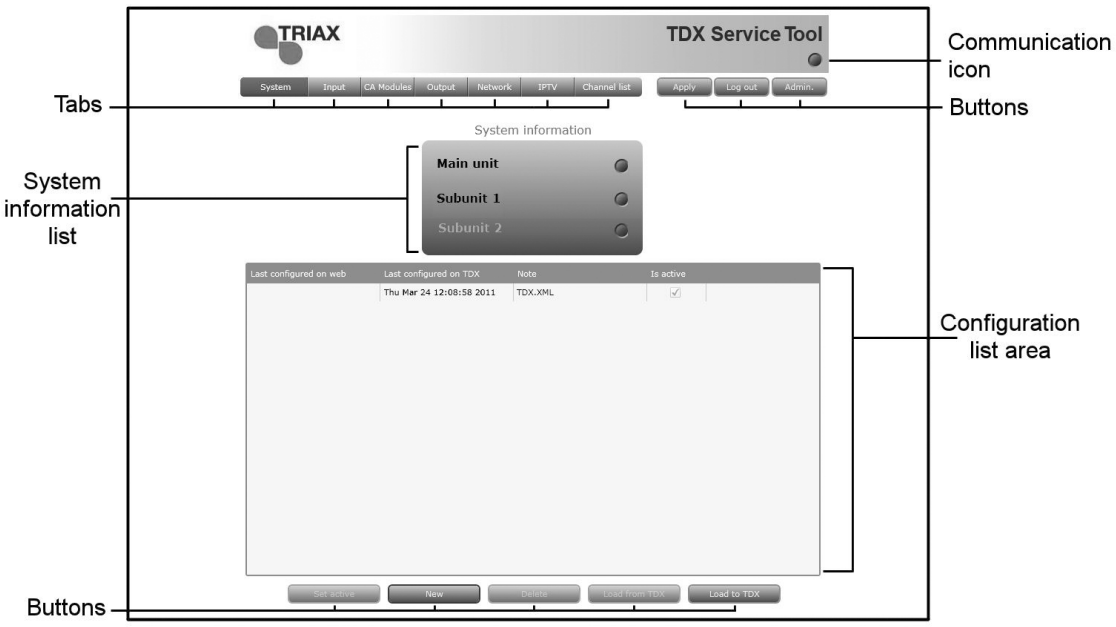
When you have pressed the Log in button the System window is displayed.

Note Every time you set up a new headend system you have to start from scratch in the TDX Service Tool, meaning that you will have to change the default password, select which language you want to use in the TDX Service Tool, set the location of your TDX headend system and change the IP address if your TDX headend system is part of a distribution network.

TDX Service Tool

System window

The System window contains a number of tabs and buttons, information about connected units and a configuration list area.



Communication icon — Informs you when the communication between the TDX system and the TDX Service Tool fails. For more information, see “Communication icon” on page 9.

Tabs — Via the tabs you enter the different stages of setting up your input and output modules.

Buttons — You use the buttons in the upper right-hand corner in connection with the TDX Service tool whereas you use the buttons below the configuration list area in connection with the entire setup itself.

System information list — This list displays whether any subunits are connected to the main headend unit and also whether they are up and running.

Configuration list area — This list area will display your present configuration of your headend system as well as the previous versions of the configuration.

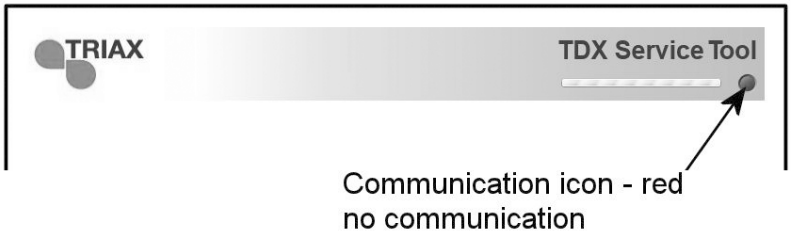
Note — In connection with every **new** headend system the System window in the TDX Service Tool will display an empty configuration list area.

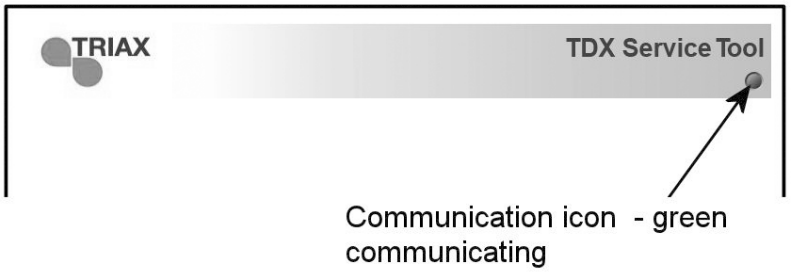
Communication icon

The colour of the communication icon tells you when TDX Service Tool is not communicating properly with the TDX headend system.

Green: The TDX Service Tool and your TDX headend system exchange information without any problems.

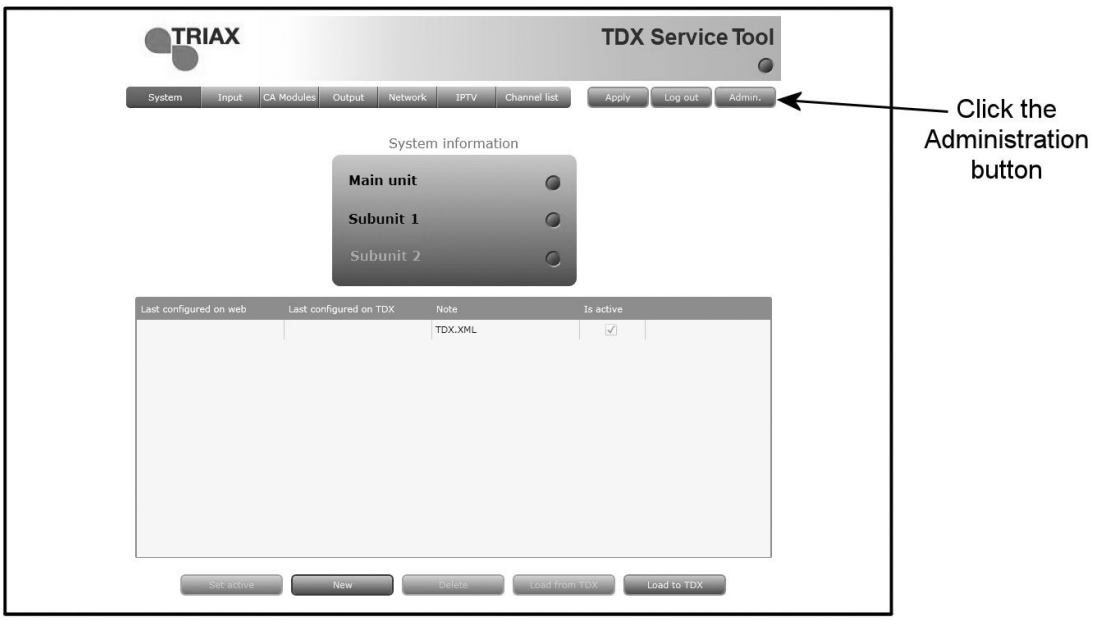
Red: The TDX Service Tool and your TDX headend system are not communicating properly. Press the F5 button to refresh the Internet browser and renew communication between the TDX Service Tool and the headend system.





Administration window

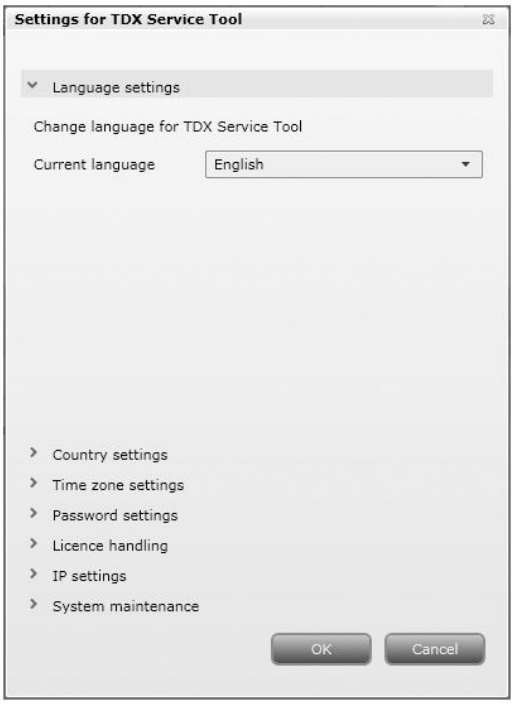
To change password, language etc. you have to open the Administration window by clicking the Admin. button in the top right-hand corner of the System window.



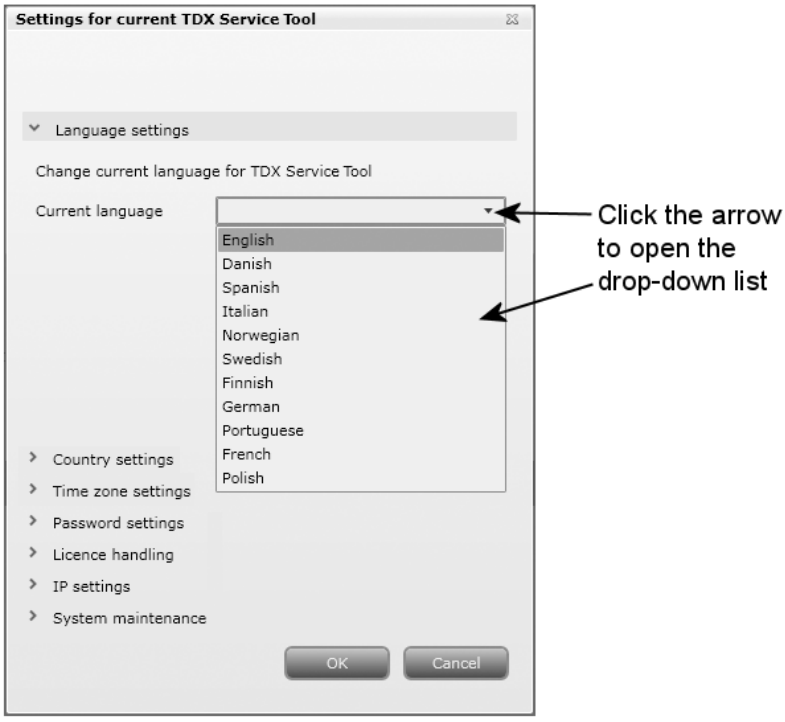
Click the Admin. button to open the Administration window.

Language settings

When you have opened the Administration window the Language settings area is displayed.



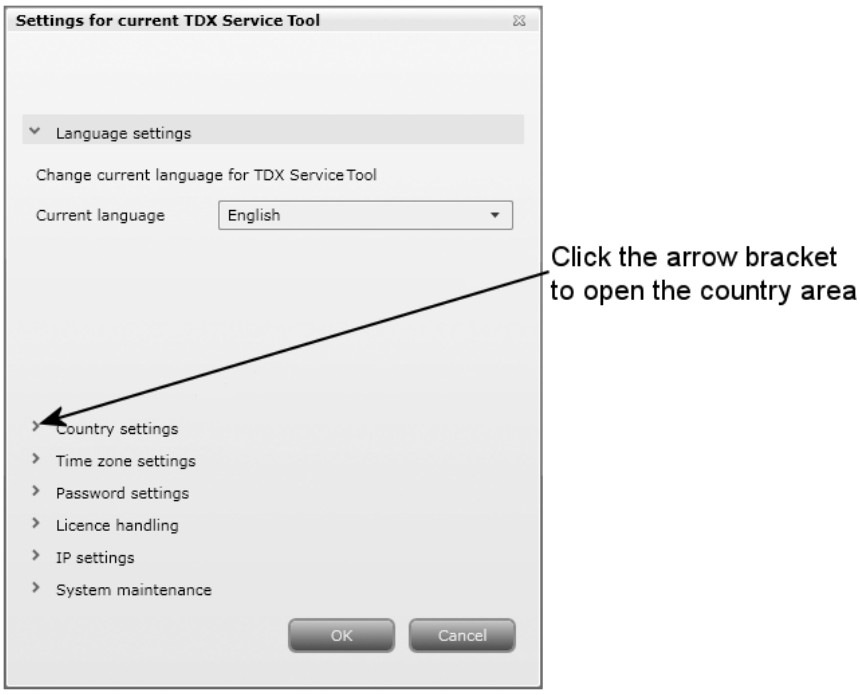
To select another language, click the arrow to the right of the Current language field to open the drop-down list with the languages you can choose from.



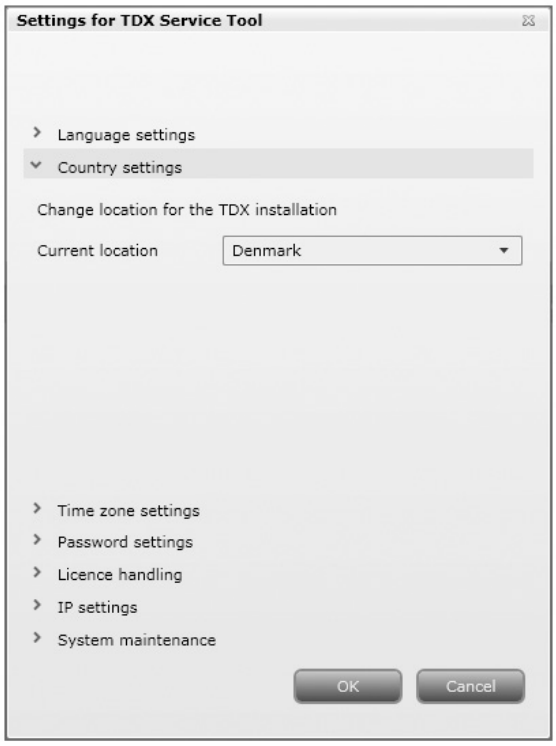
Select the language you want to use in the TDX Service Tool.
The language you selected is now displayed in the Current language field.

Country settings

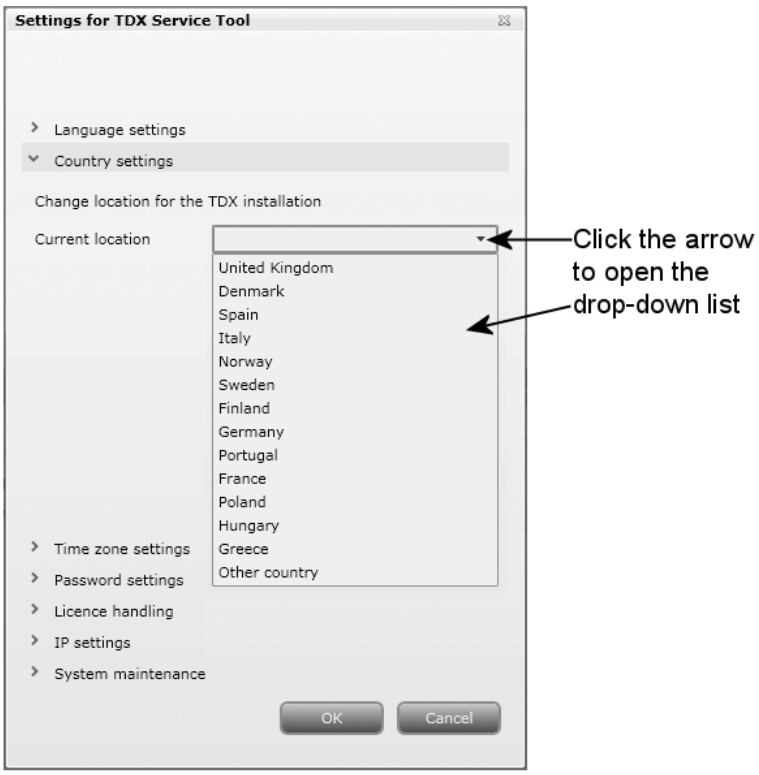
To enter the Country settings area, click the arrow bracket to the left of Country settings.



Now you can see the fields of the Country settings area.



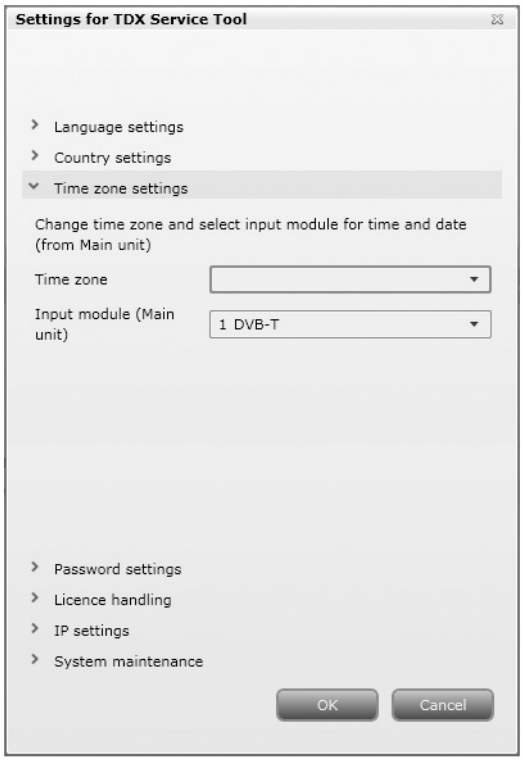
To set the location of your TDX headend system, click the arrow to the right of the Country field to open the drop-down list with the countries you can choose from.



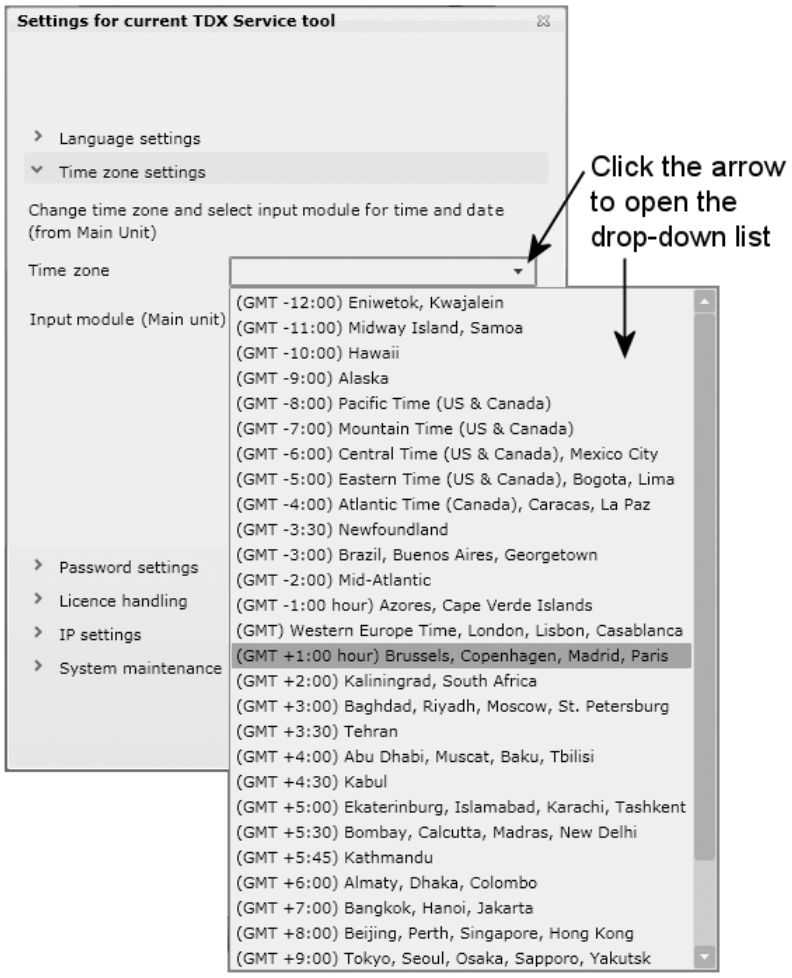
Select the country in which your TDX headend system is located. The country you selected is now displayed in the Country field.

Time zone settings

To enter the Time zone settings area, click the arrow bracket to the left of Time zone settings.



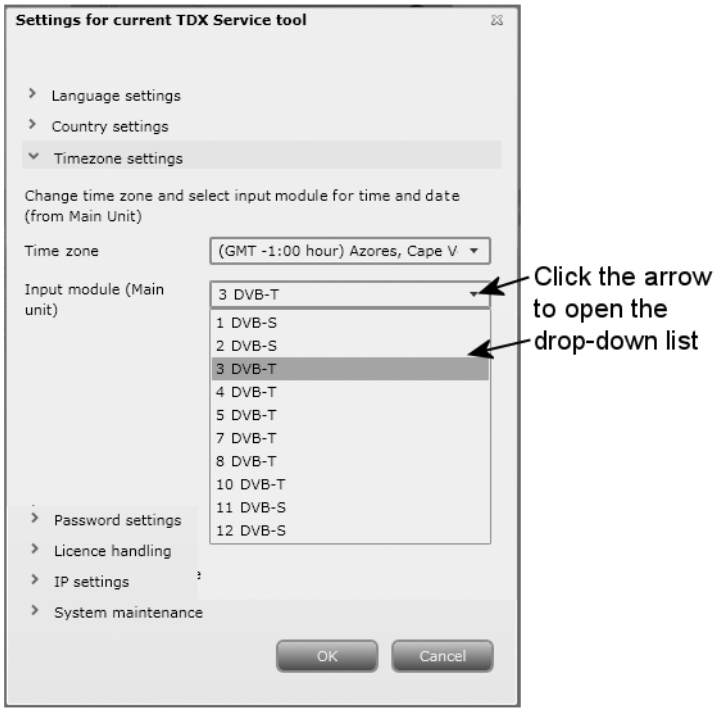
To set the time zone of your TDX headend system, click the arrow to the right of the Time zone field to open the drop-down list with the time zones you can choose from.


Settings for current TDX Service tool
Language settings
Time zone settings
Change time zone and select input module for time and date (from Main Unit)
Time zone
Input module (Main unit)
Password settings
Licence handling
IP settings
System maintenance
Click the arrow to open the drop-down list
(GMT -12:00) Eniwetok, Kwajalein
(GMT -11:00) Midway Island, Samoa
(GMT -10:00) Hawaii
(GMT -9:00) Alaska
(GMT -8:00) Pacific Time (US & Canada)
(GMT -7:00) Mountain Time (US & Canada)
(GMT -6:00) Central Time (US & Canada), Mexico City
(GMT -5:00) Eastern Time (US & Canada), Bogota, Lima
(GMT -4:00) Atlantic Time (Canada), Caracas, La Paz
(GMT -3:30) Newfoundland
(GMT -3:00) Brazil, Buenos Aires, Georgetown
(GMT -2:00) Mid-Atlantic
(GMT -1:00 hour) Azores, Cape Verde Islands
(GMT) Western Europe Time, London, Lisbon, Casablanca
(GMT +1:00 hour) Brussels, Copenhagen, Madrid, Paris
(GMT +2:00) Kaliningrad, South Africa
(GMT +3:00) Baghdad, Riyadh, Moscow, St. Petersburg
(GMT +3:30) Tehran
(GMT +4:00) Abu Dhabi, Muscat, Baku, Tbilisi
(GMT +4:30) Kabul
(GMT +5:00) Ekaterinburg, Islamabad, Karachi, Tashkent
(GMT +5:30) Bombay, Calcutta, Madras, New Delhi
(GMT +5:45) Kathmandu
(GMT +6:00) Almaty, Dhaka, Colombo
(GMT +7:00) Bangkok, Hanoi, Jakarta
(GMT +8:00) Beijing, Perth, Singapore, Hong Kong
(GMT +9:00) Tokyo, Seoul, Osaka, Sapporo, Yakutsk

Select the time zone you want to use in connection with your TDX headend system.

The time zone you selected is now displayed in the Time zone field.

To set time in accordance with the time zone, click the arrow to the right of the Input module field to open the drop-down list with all the input modules installed in your main unit.



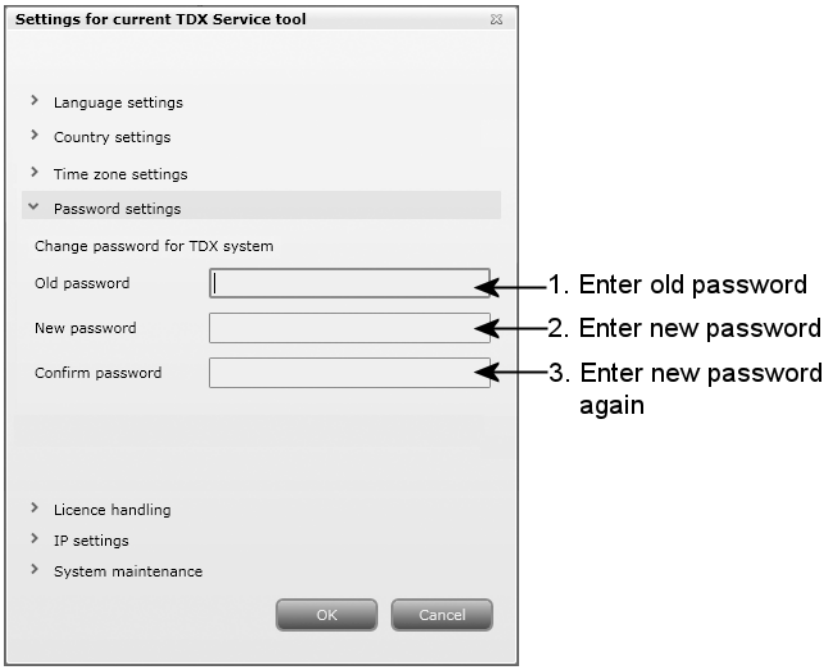
Select the input module you want to use for setting the time. The input module you selected is now displayed in the Input module field.

Password settings

To enter the Password settings area, click the arrow bracket to the left of Password settings.

To change password enter the old password in the Old password field.

Enter the new password in the New password field.

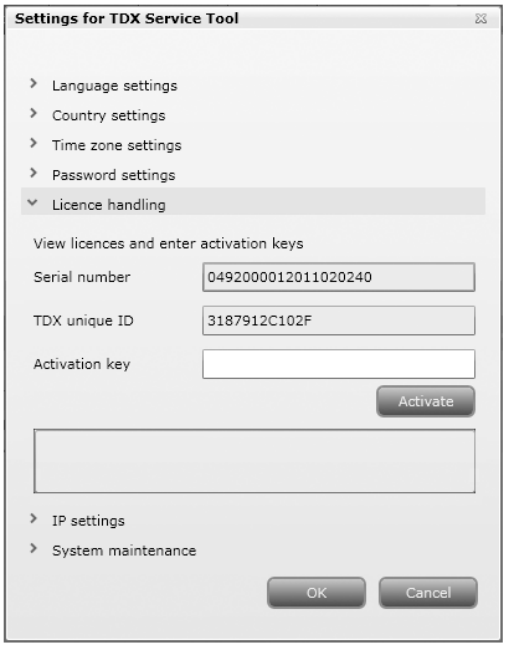


To verify the new password enter the new password once more in the Confirm password field.

Licence handling

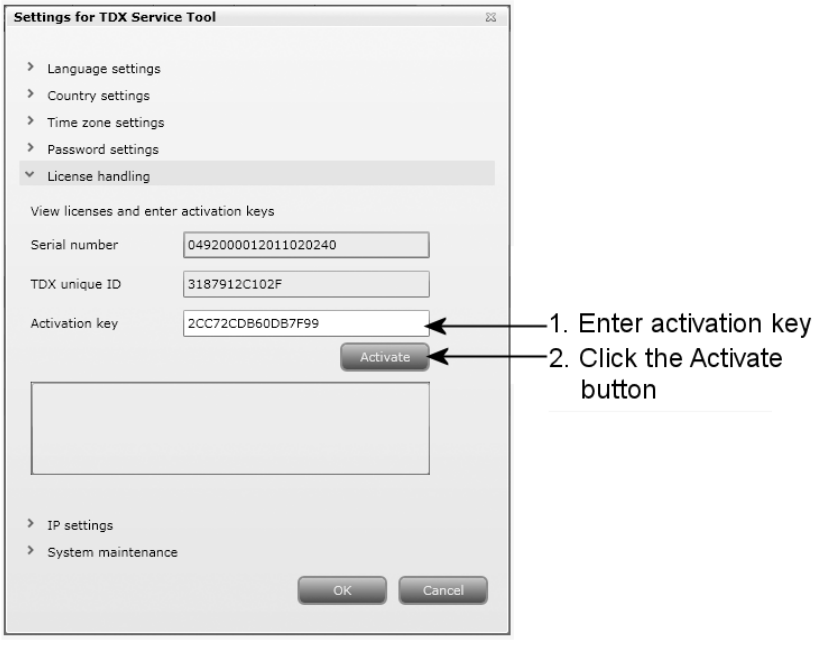
If you have bought licences to output services using e.g. IPTV you have to activate these licences in your TDX headend system using Licence handling in the Administration window.

To enter the Licence handling area, click the arrow bracket to the left of Licence handling.

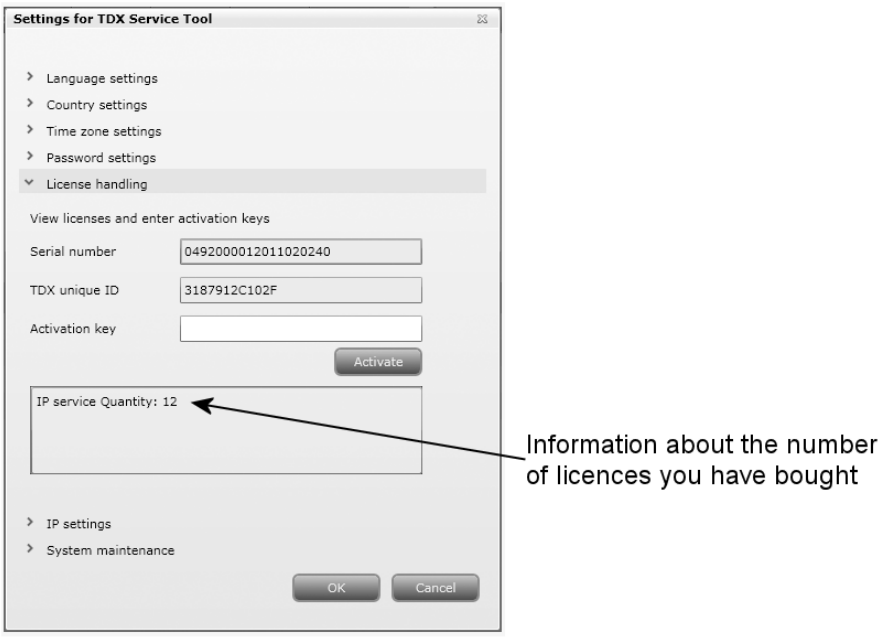


Before you can activate a licence you have to contact Triax and provide information about the serial number displayed in the Serial number field and the ID displayed in the TDX unique ID field.

When Triax has received the ID of your TDX they will provide you with the activation key.



Enter the activation key in the Activation key field then click the Activate button to access the licence you have bought.



Note When you have clicked the Activate button to access your licence your TDX unique ID is changed and the activation key is deleted.

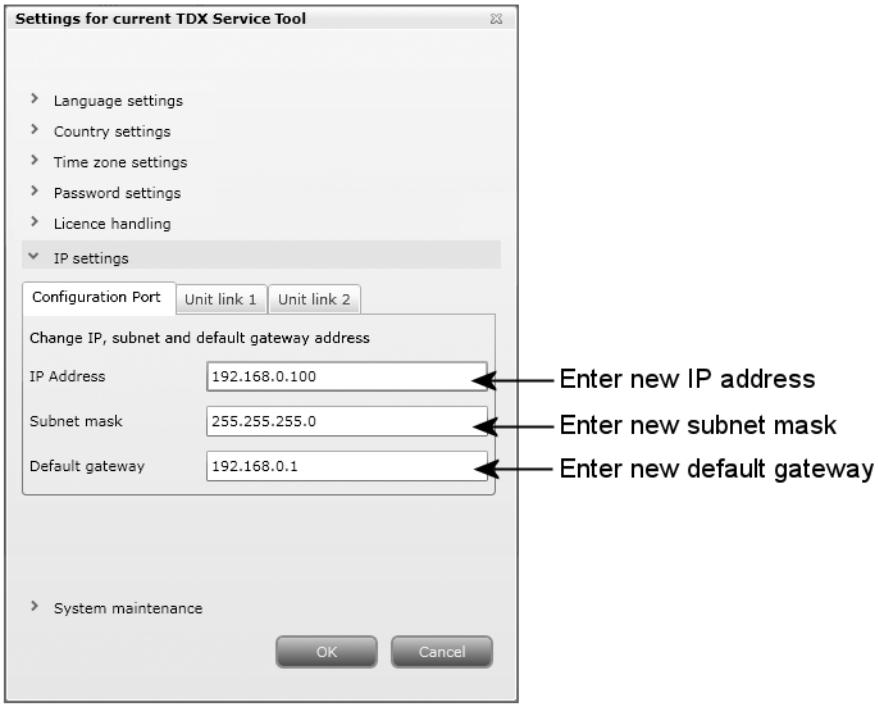
If you want to buy more licences you will have to contact Triax with the new TDX unique ID to get a new activation key to access an additional licence.

When you have accessed your licence you use e.g. the IPTV tab to select the services you want to output in connection with the licence.

IP settings

If your TDX headend system is part of a network you have to change the IP address of the configuration port to include the main unit in the network.

To enter the IP settings area, click the arrow bracket to the left of IP settings.



Enter a new IP address, subnet mask and default gateway in the corresponding fields.

In case you need to reset the IP address to the factory default address, you have to use the ID switch.

To return to factory default settings do the following:

- Switch off the power to the main unit.
- Set the ID switch on the main unit to “7”, then switch on the power. The four LEDs flash red and yellow until the process of resetting the IP address has been completed.

  If the reset process has been successful the LEDs will turn green.

  If the reset process fails the LEDs will turn red.
- Switch off the power to the main unit.
- Set the ID switch on the main unit back to the initial setting.
- Switch on the power to the main unit.

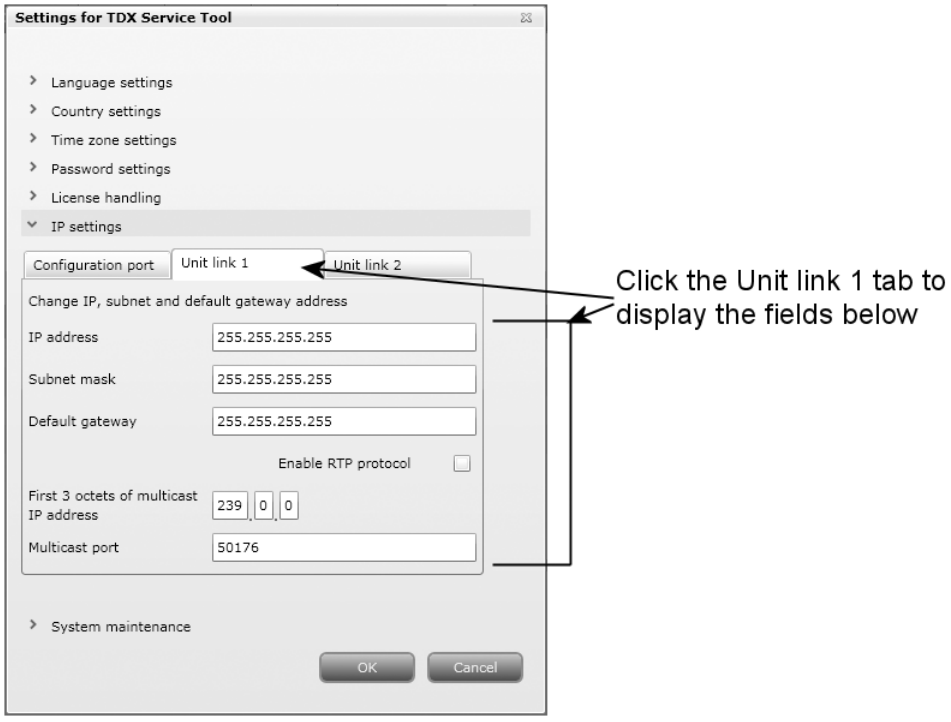
Now you have reset the IP address to the factory default address.

Important To make a changed IP address take effect you have to reboot the TDX headend system using the Reboot button in the System maintenance area or switch off the power.

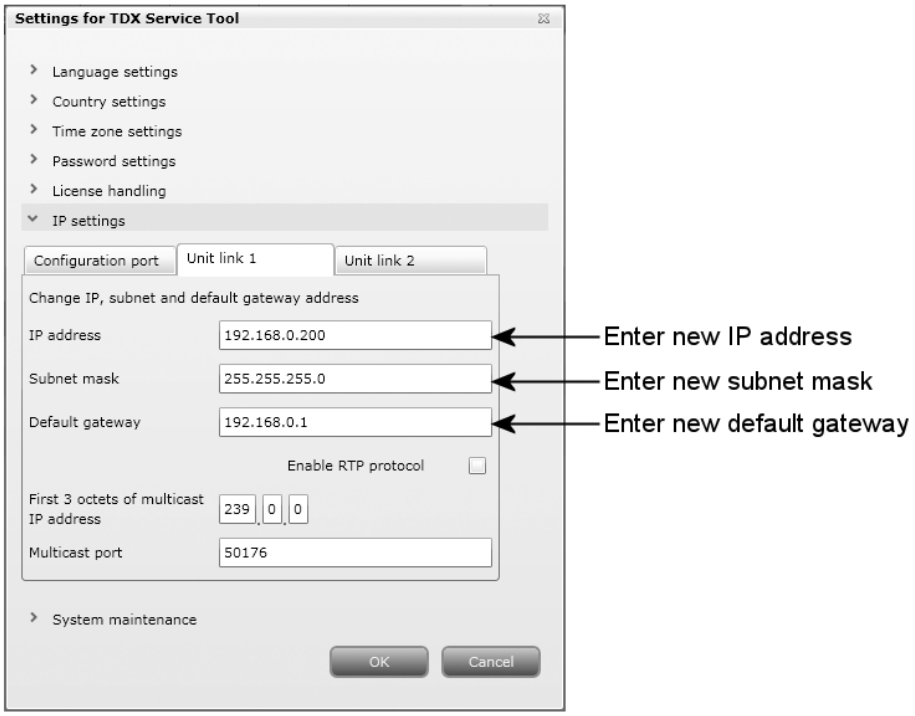
To output services using an IPTV system or to include a subunit in a network you have to enter an IP address, subnet mask and default gateway for each unit link socket you use.

With regard to IPTV you also have to enter a multicast IP address and a multicast port for each unit link socket you use. .

To enter the IP settings area, click the arrow bracket to the left of IP settings. Now click the Unit link 1 tab to display the relevant fields.



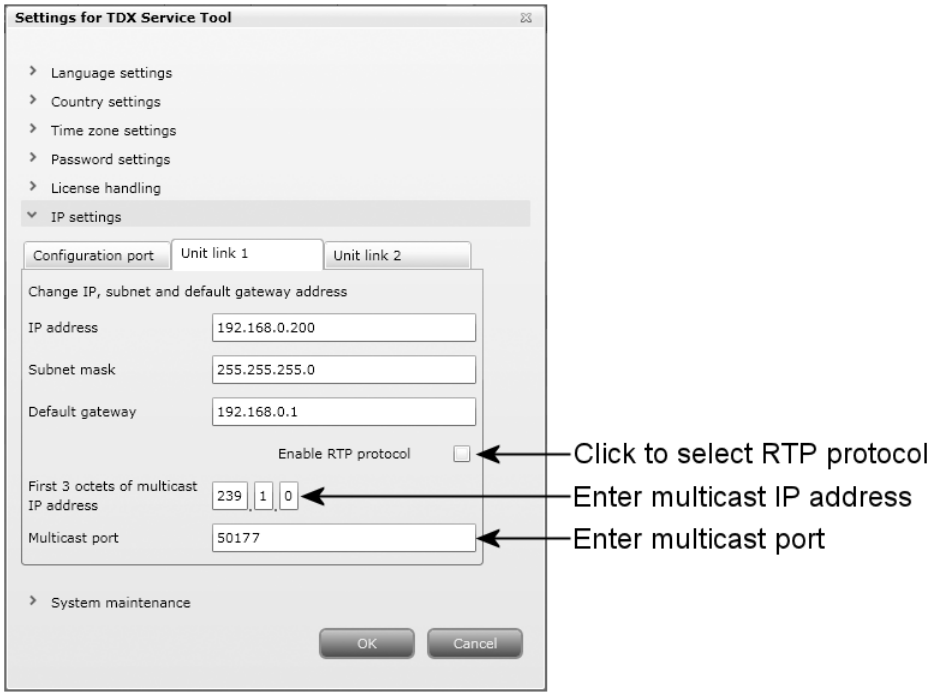
Enter a new IP address, subnet mask and default gateway in the corresponding fields.



In connection with IPTV the fields at the bottom of the area are needed as well.

Click the Enable RTP protocol check box if you want to use Real-time Transport Protocol in your IPTV system.

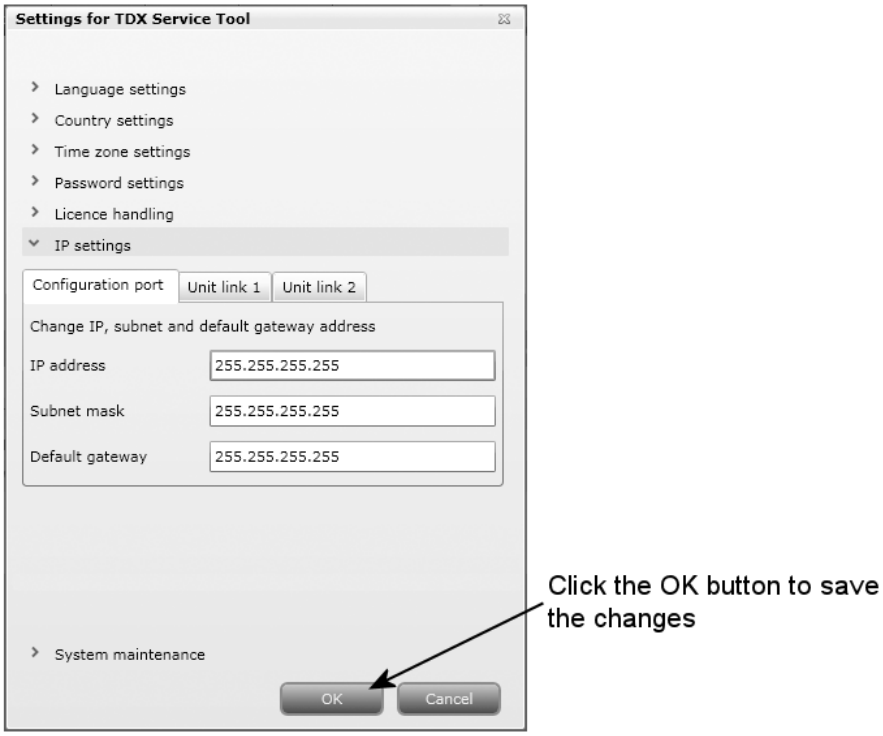
In case you cannot use the default values displayed in the two fields, enter a new multicast IP address and a multicast port in the corresponding fields.



Click the Unit link 2 tab if you have connected an IPTV system or a second subunit to the Unit link 2 socket and enter an IP address, subnet mask and default gateway and in connection with IPTV also a multicast IP address and a multicast port.

Important To make a changed IP address take effect you have to reboot the TDX headend system using the Reboot button in the System maintenance area or switch off the power.

When you have made the changes you want make in the Administration window, click the OK button at the bottom of the Administration window to save the changes and return to the System window.



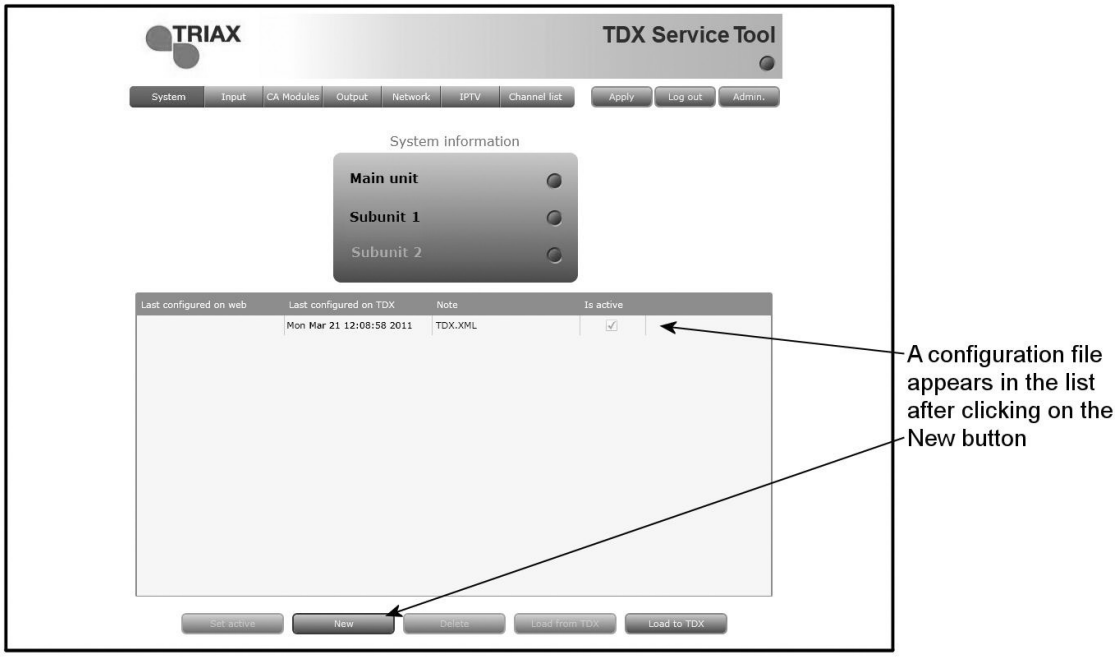
Note You only need to change password, language, time zone, country and IP addresses the first time you enter a new TDX headend system in order to set it up.

WARNING - All unsaved changes will be lost in case of a power cut

Create a new system configuration

To create a new configuration, click the New configuration button in the System window.

Now a configuration file is created and the file is listed in the configuration list area.



You use the buttons below the configuration list area to manage configuration files in your headend system.

Set active Click this button when you want to activate a selected configuration file.

New Click this button to create a new the configuration file.

Delete Click this button to delete a selected configuration file.

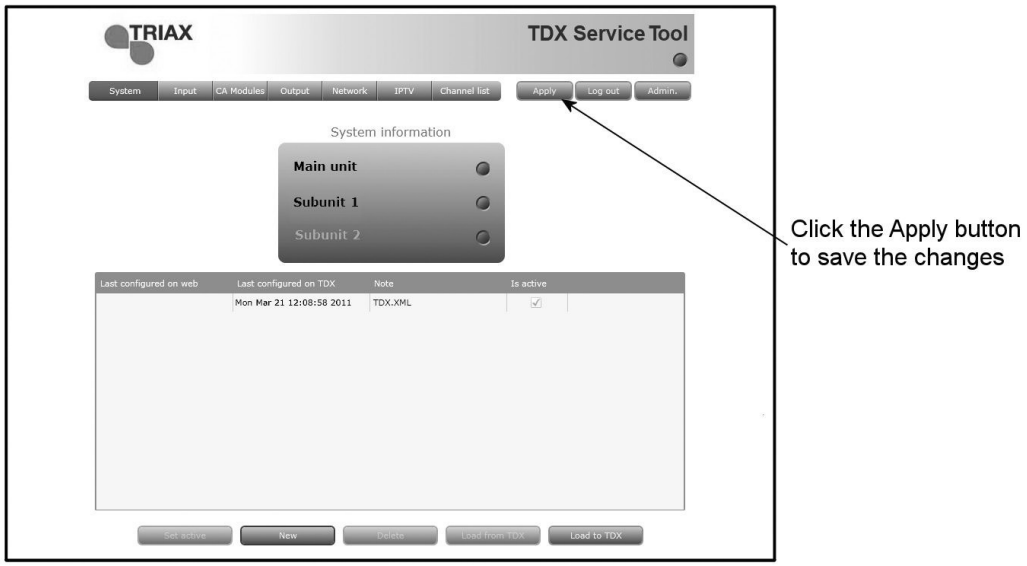
Load to TDX Click this button to download a configuration file from your computer/laptop to your TDX system. More information about downloading, see “Load to TDX” on page 45.

Load from TDX Click this button to upload the configuration file from the TDX system to your computer/laptop. More information about uploading, see "Load from TDX" on page 46.

To activate a new configuration file, select the file and click the Set active button, and the Apply button to save the configuration file.

Save configuration

An **important button** when you change your configuration of the headend system is the **Apply** button placed in the upper right-hand corner of the TDX Service Tool window.



Apply

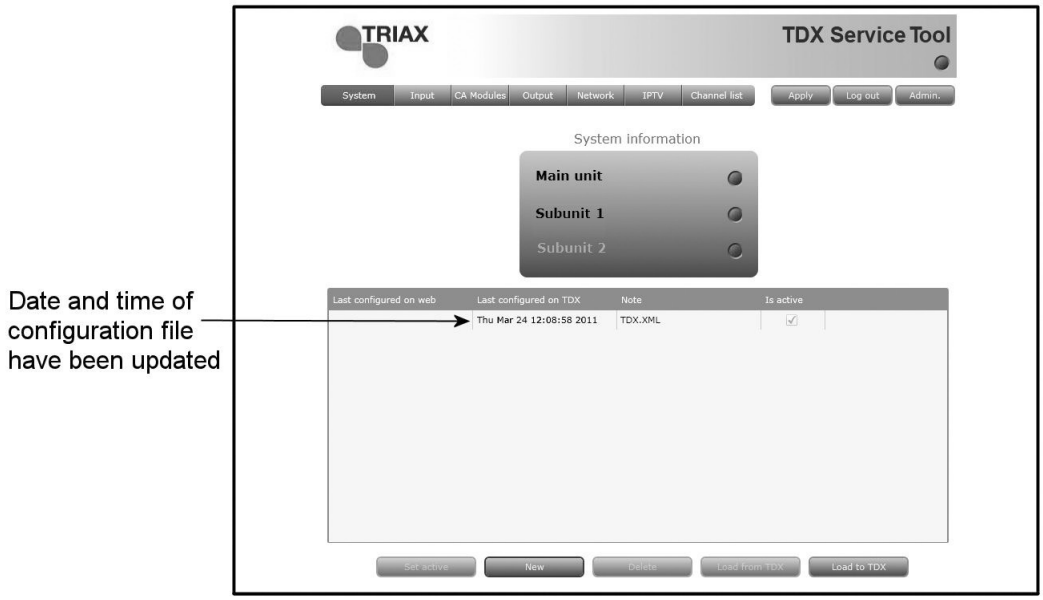
Whenever you have made changes in your configuration, “Apply” on the Apply button turns red to tell you that you have unsaved changes that need to be saved.

Click the Apply button to **save** the changes. When changes have been saved the “Apply” text looses the red colour.

WARNING - All unsaved changes will be lost in case of a power cut

Change system configuration

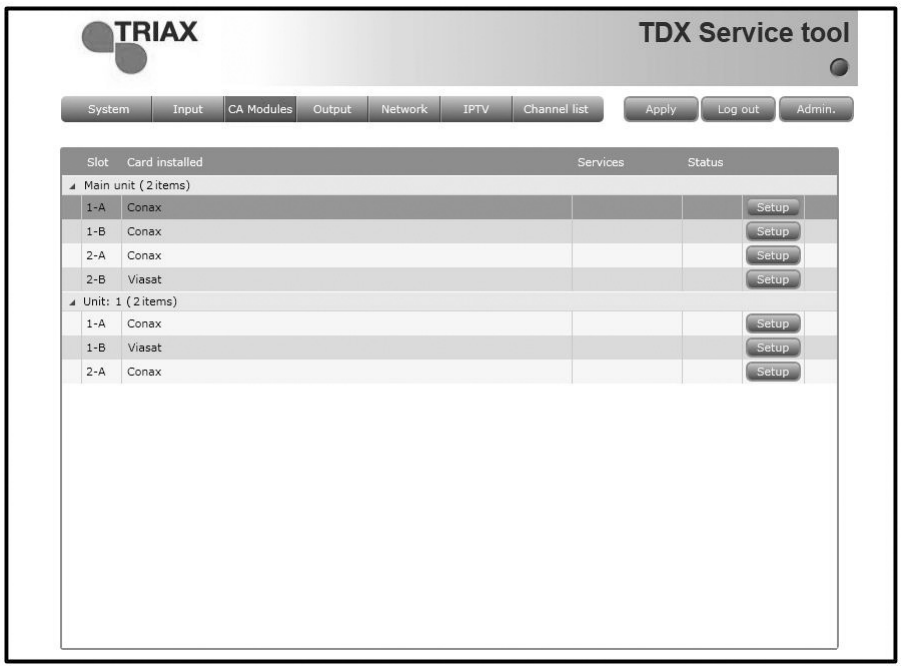
When you change an existing configuration of your headend system the TDX Service Tool updates the date and time of the configuration file when you save the changes using the Apply button.



CA Modules window

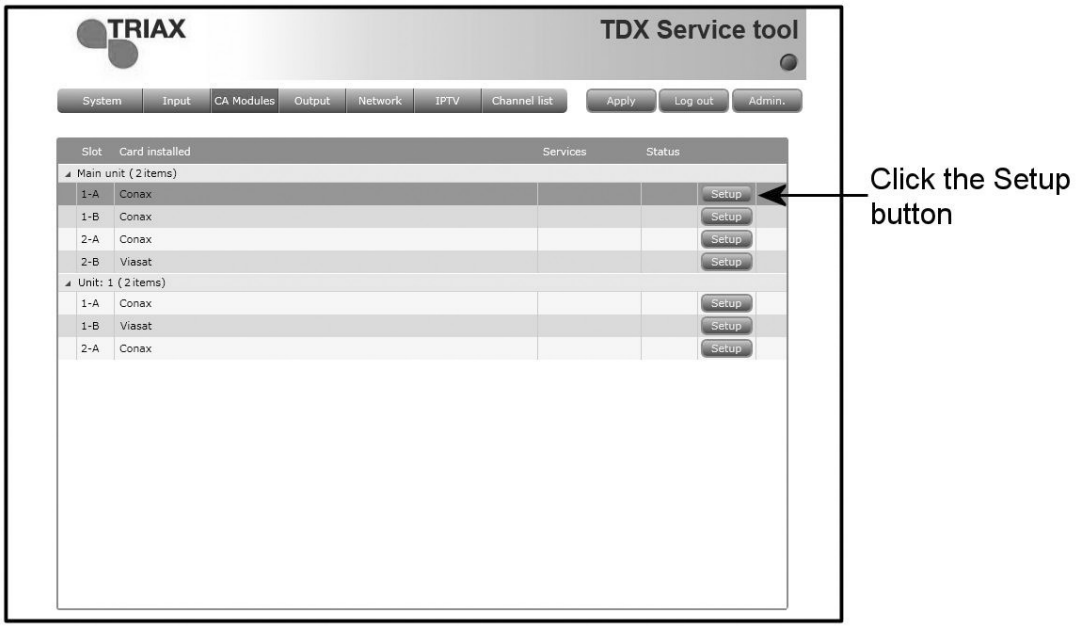
Click the CA Modules tab in the TDX Service Tool to display the CA Modules window.

The first time you display the CA Modules window in a new configuration the module list only displays the number and type of the CA modules that you have inserted in the main and subunits.



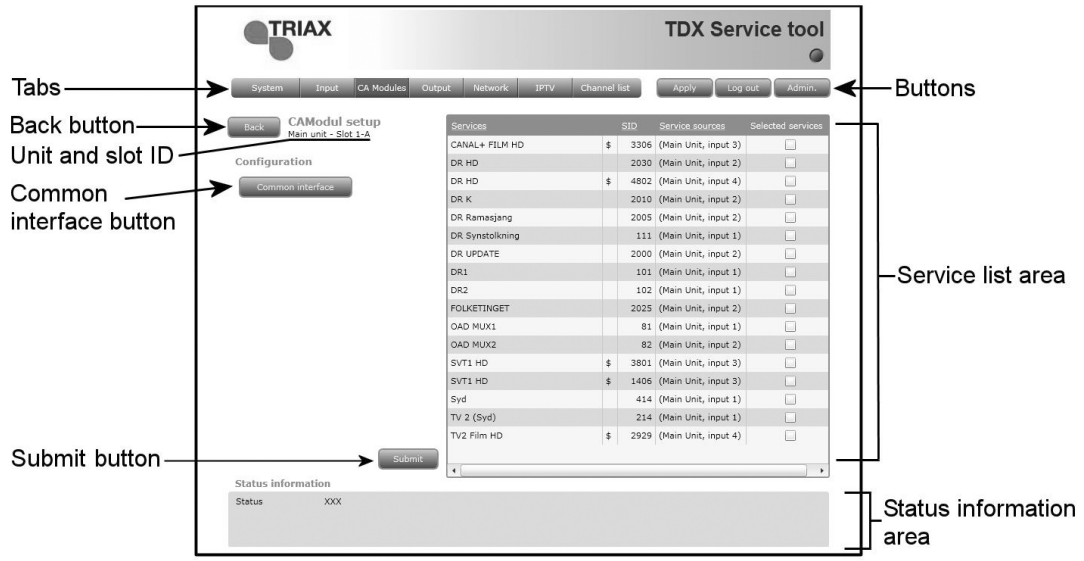
You have to configure the CA modules one by one.

To display the Configuration window, click the Setup button of the CA module you want to configure.



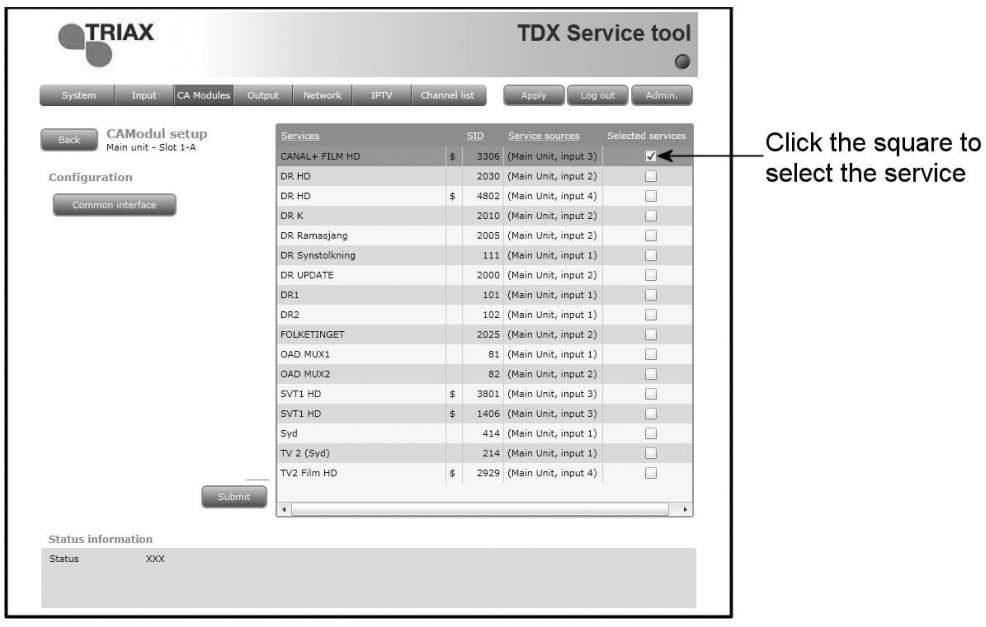
CA Modules configuration window

The first time the TDX Service Tool displays the Configuration window for a CA module in a new configuration nothing is selected in the service list area.



In the Service list area you can select the service or services that you want to descramble. The services that have to be descrambled before you can output them are marked with a dollar sign - $.

To select a service, click the check box (square) to the right of the service you want in the service list area.


TRIAX
TDX Service tool
System
Input
CA Modules
Output
Network
IPTV
Channel list
Apply
Log out
Admin.
Back
CAModul setup
Main unit - Slot 1-A
Configuration
Common interface
Services
SID
Service sources
Selected services
CANAL+ FILM HD $ 3306 (Main Unit, input 3)
DR HD 2030 (Main Unit, input 2)
DR HD $ 4802 (Main Unit, input 4)
DR K 2010 (Main Unit, input 2)
DR Ramasjang 2005 (Main Unit, input 2)
DR Synstolkning 111 (Main Unit, input 1)
DR UPDATE 2000 (Main Unit, input 2)
DR1 101 (Main Unit, input 1)
DR2 102 (Main Unit, input 1)
FOLKETINGET 2025 (Main Unit, input 2)
OAD MUX1 81 (Main Unit, input 1)
OAD MUX2 82 (Main Unit, input 2)
SVT1 HD $ 3801 (Main Unit, input 3)
SVT1 HD $ 1406 (Main Unit, input 3)
Syd 414 (Main Unit, input 1)
TV 2 (Syd) 214 (Main Unit, input 1)
TV2 Film HD $ 2929 (Main Unit, input 4)
Submit
Status information
Status XXX
Click the square to select the service

When you have selected the service you want to descramble you have to click the Submit button to enter this information in to the headend system and return to the CA Modules window.

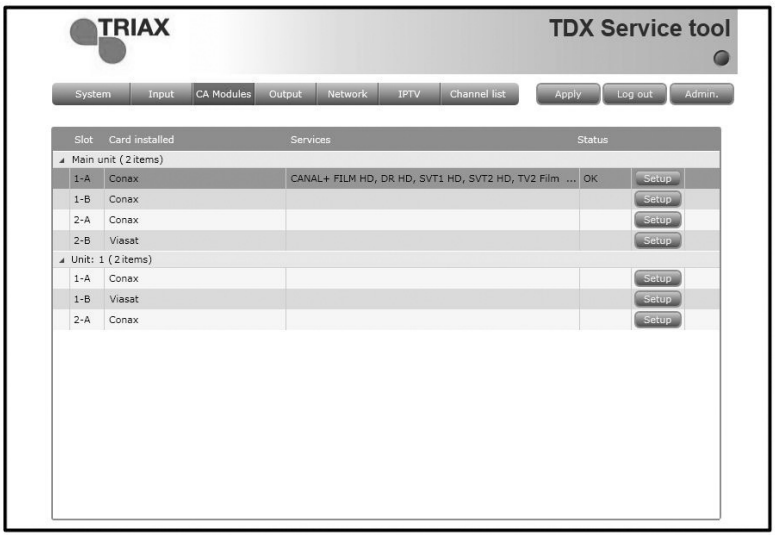
You only need to use the Common interface button when you encounter problems with descrambled services.

Clicking the Common interface button gives you access to information from the smart card inserted in the CA module. The type of information provided by the smart card depends on the card itself and its make.

Below is an example of the interface of a Conax card.

Please refer to the user guides of the CA modules and smart cards you have inserted in the output modules for further information.

When you return to the CA Modules window the descrambled services will be displayed next to the CA module you have configured.



Remember to click the Apply button in the upper right-hand corner from time to time to save new settings in the configuration.

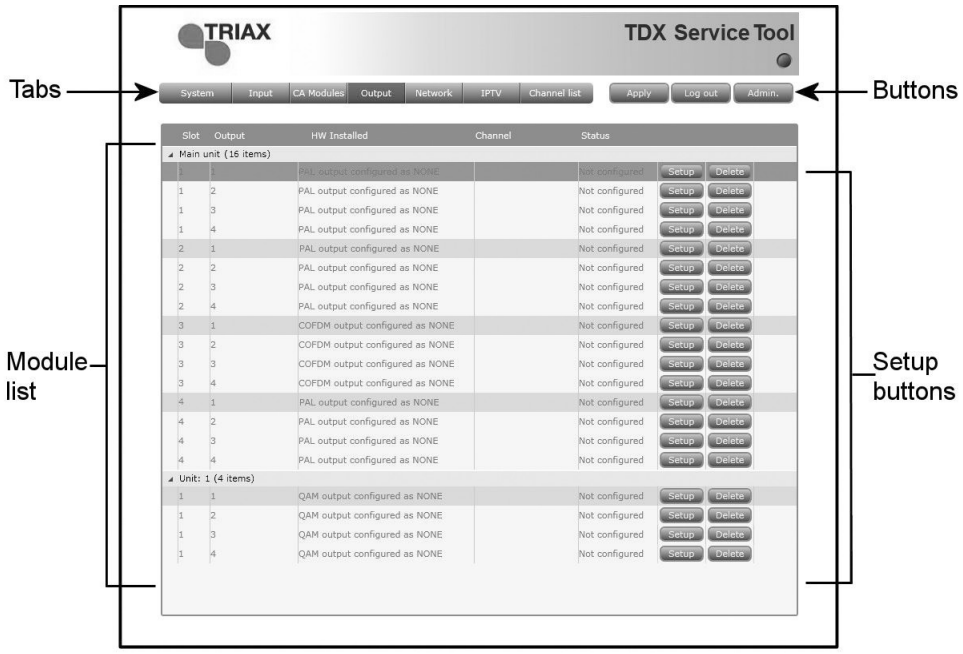
Status information

To be implemented later.

Output window

Click the Output tab in the TDX Service Tool to display the Output window.

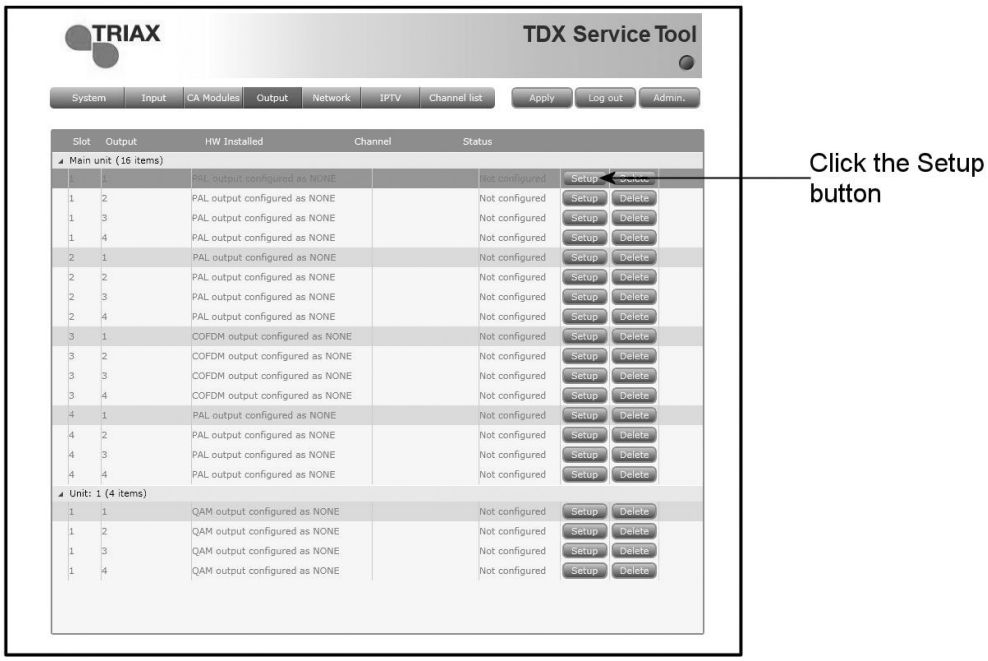
The first time you display the Output window in a new configuration the module list only displays the number and type of output modules that you have inserted in the main and subunits.



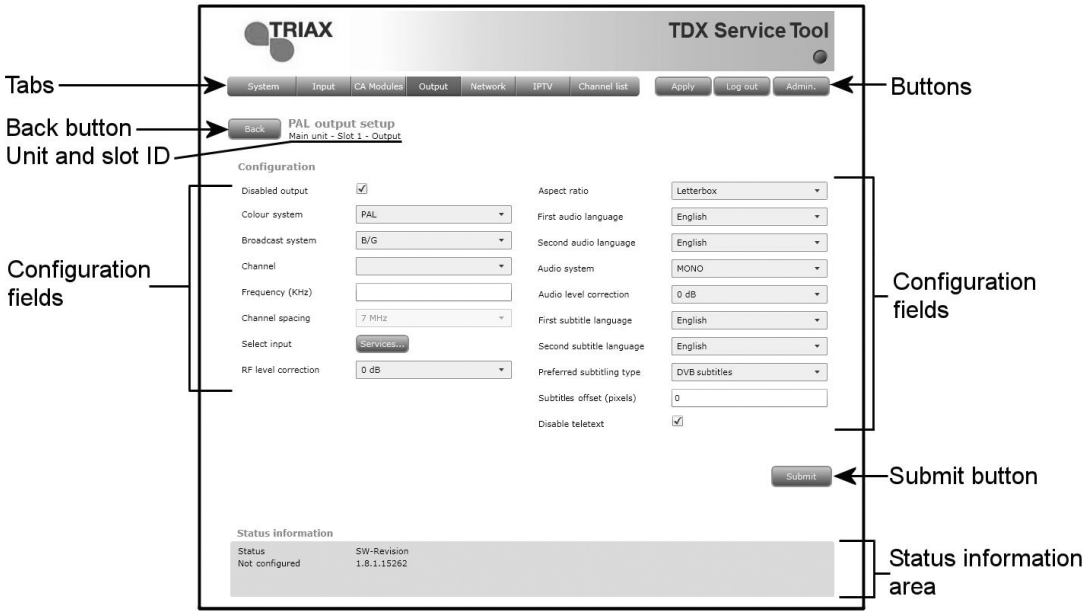
You have to configure the output modules one by one.

Note The four channels on an output module is locked together so you can only change the first channel.

To display the Configuration window, click the Setup button of the PAL output module you want to configure.



Configuration of output modules

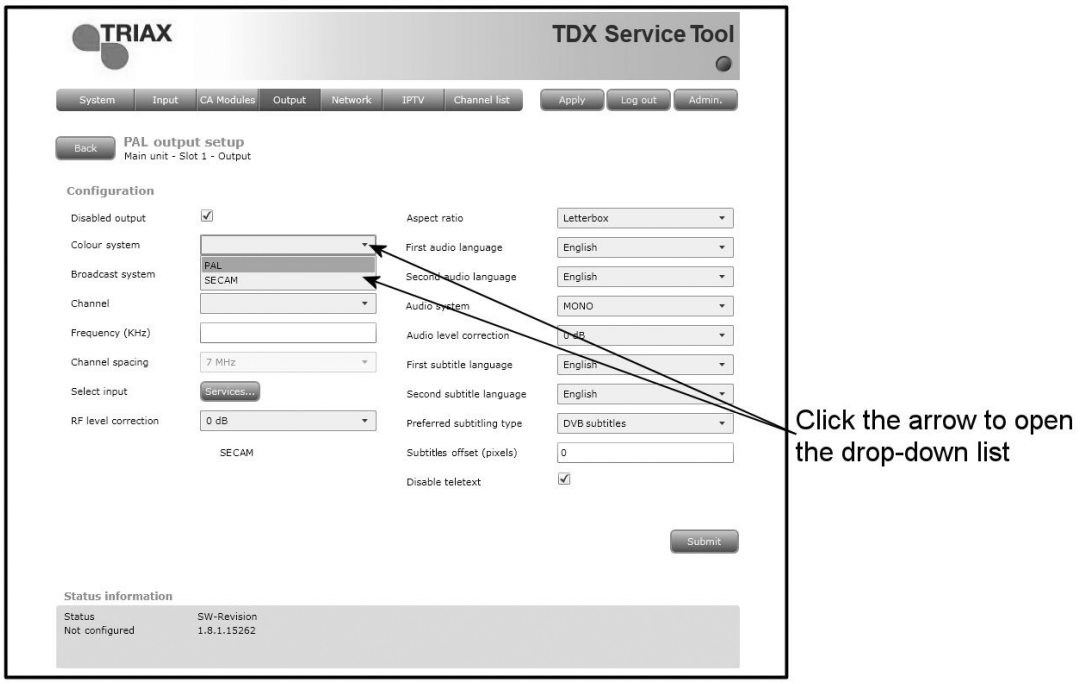


The first time the TDX Service Tool displays the Configuration window for an output module in a new configuration the fields in the window will either display a default value or be empty.

Disabled output If you want to disable this output, click the Disabled output check box.

Colour system To select another colour system, click the arrow to the right of the Colour system field to open the drop-down list with the systems you can choose from.

Select the system you want to use.



Broadcast system

To select another TV system, click the arrow to the right of the Broadcast system field to open the drop-down list with the systems you can choose from.

Select the system you want to use.

Channel, Frequency and Channel spacing

You have two possibilities when you configure a PAL module:

- You can use the specifications of the channel plan

or

- You can enter a frequency manually in order to search for the services you require.

Using the channel plans:

To select the required channel, click the arrow to the right of the Channel field to open the drop-down list with the channels you can choose from.

Select the channel you want to use.

When you have selected a channel the Frequency and Channel spacing fields are automatically filled in.

Enter frequency manually:

To be able to enter a frequency manually, click the arrow to the right of the Channel field to open the drop-down list with the channels you can choose from.

Select “Frequency” from the drop-down list.

Enter the desired frequency in kHz in the Frequency field.

To select the required channel spacing, click the arrow to the right of the Channel spacing field to open the drop-down list with the channels spacings you can choose from.

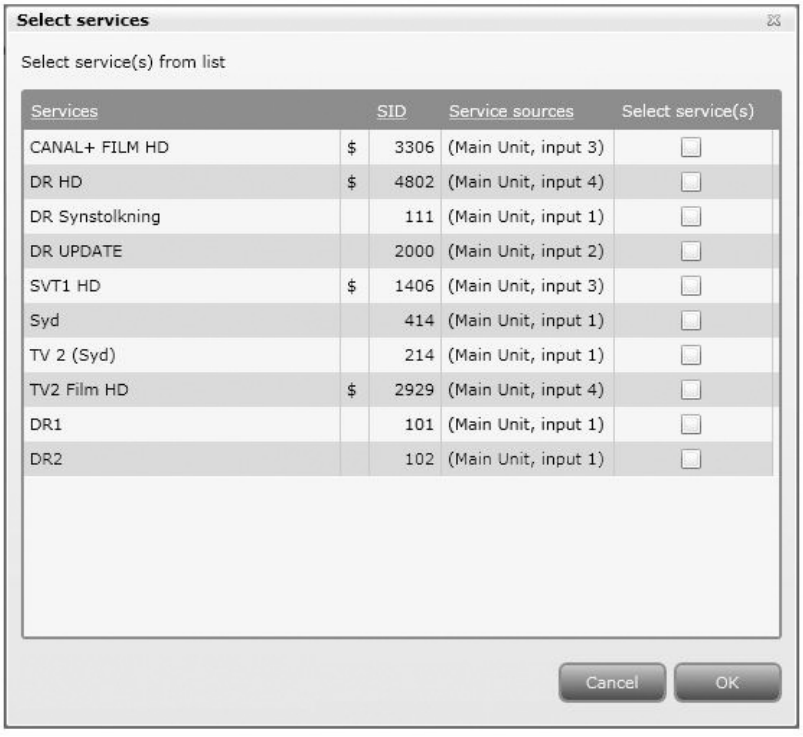
Select the channel spacing you want to use.

Note When you have selected a channel on the first output of the output module using the channel plan or entered a frequency manually then you have also set up the other three RF channels on the module in question. You only need to select services for each of the three other RF channels, or disable one or more of the three channels.

Select input

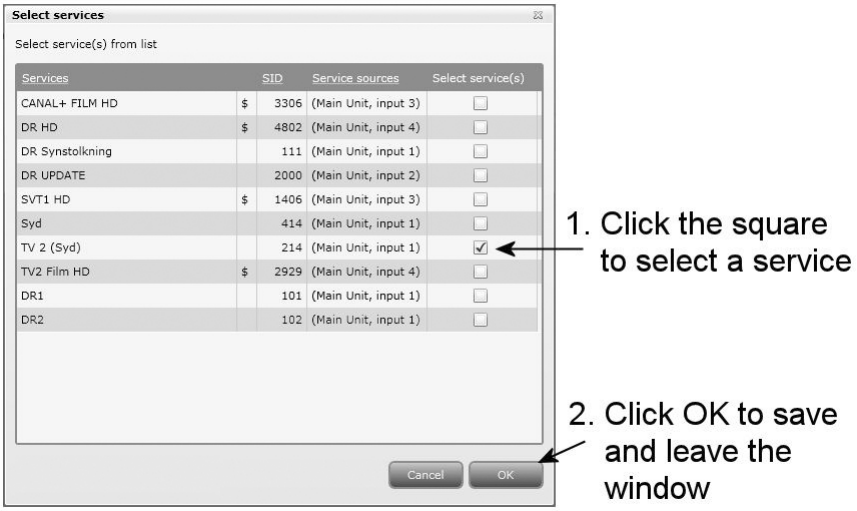
To select services, click the Services... button next to Select input label to open the Select services window.

Note Using a PAL module you can only output one service on each RF channel.


Select services
Select service(s) from list
Services
SID
Service sources
Select service(s)
CANAL+ FILM HD $ 3306 (Main Unit, input 3)
DR HD $ 4802 (Main Unit, input 4)
DR Synstolkning 111 (Main Unit, input 1)
DR UPDATE 2000 (Main Unit, input 2)
SVT1 HD $ 1406 (Main Unit, input 3)
Syd 414 (Main Unit, input 1)
TV 2 (Syd) 214 (Main Unit, input 1)
TV2 Film HD $ 2929 (Main Unit, input 4)
DR1 101 (Main Unit, input 1)
DR2 102 (Main Unit, input 1)
Cancel
OK

In the Select Services window you can select the service that you want to output.

Note By clicking one of those column headlines that are underlined in the Select services window you can sort the list into alphabetical or numerical order depending on which column headline you click.


Select services
Select service(s) from list
Services
SID
Service sources
Select service(s)
CANAL+ FILM HD $ 3306 (Main Unit, input 3)
DR HD $ 4802 (Main Unit, input 4)
DR Synstolkning 111 (Main Unit, input 1)
DR UPDATE 2000 (Main Unit, input 2)
SVT1 HD $ 1406 (Main Unit, input 3)
Syd 414 (Main Unit, input 1)
TV 2 (Syd) 214 (Main Unit, input 1)
TV2 Film HD $ 2929 (Main Unit, input 4)
DR1 101 (Main Unit, input 1)
DR2 102 (Main Unit, input 1)
Cancel
OK
1. Click the square to select a service
2. Click OK to save and leave the window

To select a service, click the check box (square) to the right of the service you want.

Click OK to return to the Configuration window.

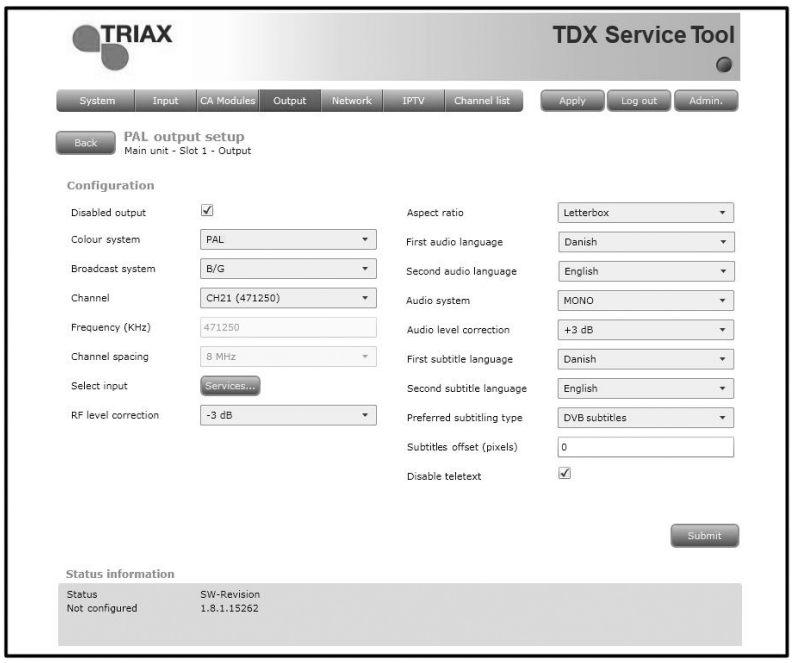
Now you continue to select or enter values in the other fields in the Configuration window.

RF level correction

To select another RF level correction, click the arrow to the right of the RF level correction field to open the drop-down list with the levels you can choose from.

Select the level you want to use.

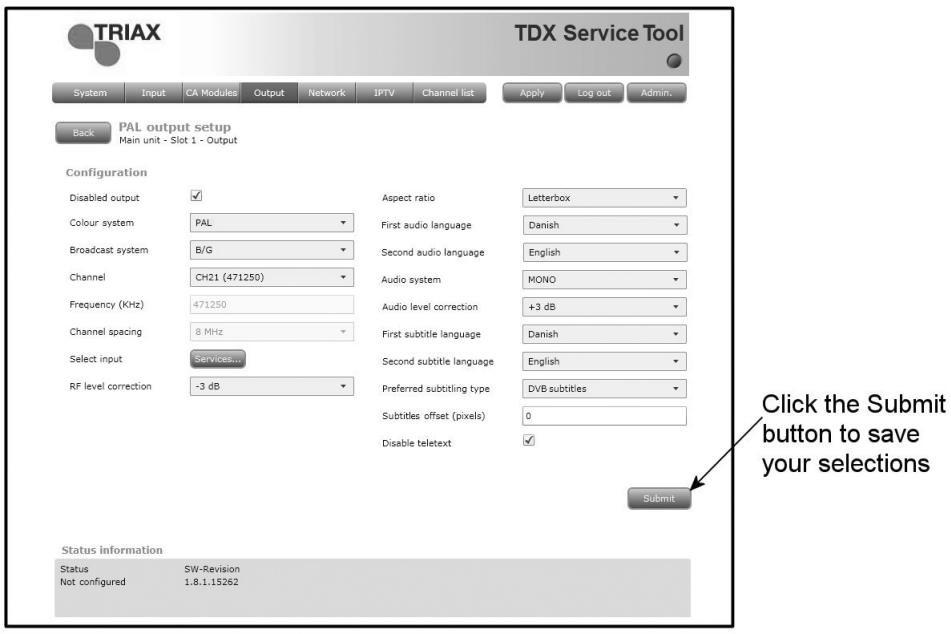
Aspect ratio	To select the desired picture format, click the arrow to the right of the Aspect ratio field to open the drop-down list with the formats you can choose from. Select the format you want to use.
First audio language	To select the preferred audio language, click the arrow to the right of the First audio language field to open the drop-down list with the languages you can choose from. Select the language you want to use.
Second audio language	To select the second choice of audio language, click the arrow to the right of the Second audio language field to open the drop-down list with the languages you can choose from. Select the language you want to use.
Audio system	To select audio system, click the arrow to the right of the Audio system field to open the drop-down list with the audio systems you can choose from. Select the audio system you want to use.
Audio level correction	To make a correction to the audio level, click the arrow to the right of the Audio level correction field to open the drop-down list with the correction in decibel (dB) you can choose from. Select the audio level correction you want to use
First subtitle language	To select the preferred subtile language, click the arrow to the right of the First subtitle language field to open the drop-down list with the languages you can choose from. Select the language you want to use.
Second subtitle language	To select the second choice of subtitle language, click the arrow to the right of the Second subtitle language field to open the drop-down list with the languages you can choose from. Select the language you want to use.
Preferred subtitling type	To select the desired subtitling type or to turn subtitling off, click the arrow to the right of the Preferred subtitling type field to open the drop-down list with the options you can choose from. Select the subtitling type you want to use.
Subtitles offset	To move the position of the subtitles on a TV screen a bit up or down you can enter the number of pixels (from -40 to +40) you want to move the subtitles up or down in the Subtitles offset field..
Disable teletext	If you want to make teletext unavailable, click the Disabled teletext check box.



Note When you display the Configuration window for an output module that has been configured, all fields are filled in and services have been selected.

If you want to change the existing values or services just follow the same procedure as when you configure an output module for the very first time.

When you have selected or inserted the values you want you have to click the Submit button to enter this information in to the headend system and return to the Output window.



Remember to click the Apply button in the upper right-hand corner from time to time to save new settings in the configuration.

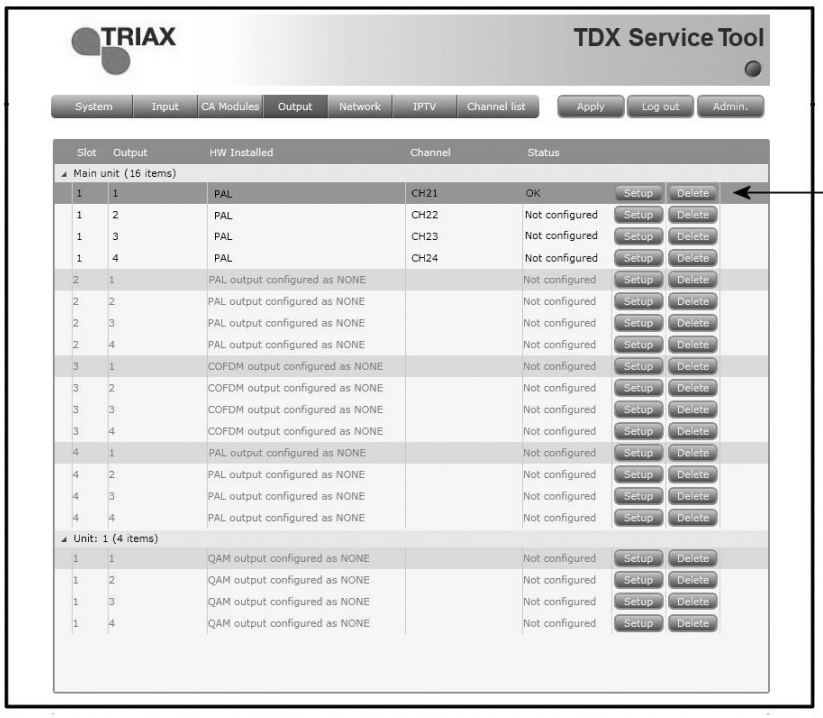
Status information

Status information is placed at the bottom of the Configuration window. The information displayed in the configuration window of a PAL module includes status and revision of software.

Status Informs you about the state of the output module.

SW revision Displays the software version of the output module.

When you return to the Output window the configuration of the output module is displayed in the module list.

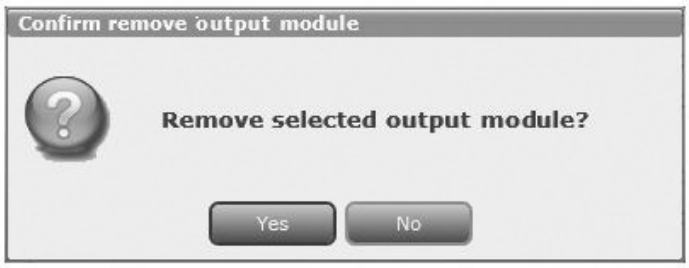

TRIAX
TDX Service Tool
System
Input
CA Modules
Output
Network
IPTV
Channel list
Apply
Log out
Admin.
Slot
Output
HW Installed
Channel
Status
Main unit (16 items)
1 1 PAL CH21 OK Setup Delete
1 2 PAL CH22 Not configured Setup Delete
1 3 PAL CH23 Not configured Setup Delete
1 4 PAL CH24 Not configured Setup Delete
2 1 PAL output configured as NONE Not configured Setup Delete
2 2 PAL output configured as NONE Not configured Setup Delete
2 3 PAL output configured as NONE Not configured Setup Delete
2 4 PAL output configured as NONE Not configured Setup Delete
3 1 COFDM output configured as NONE Not configured Setup Delete
3 2 COFDM output configured as NONE Not configured Setup Delete
3 3 COFDM output configured as NONE Not configured Setup Delete
3 4 COFDM output configured as NONE Not configured Setup Delete
4 1 PAL output configured as NONE Not configured Setup Delete
4 2 PAL output configured as NONE Not configured Setup Delete
4 3 PAL output configured as NONE Not configured Setup Delete
4 4 PAL output configured as NONE Not configured Setup Delete
Unit: 1 (4 items)
1 1 QAM output configured as NONE Not configured Setup Delete
1 2 QAM output configured as NONE Not configured Setup Delete
1 3 QAM output configured as NONE Not configured Setup Delete
1 4 QAM output configured as NONE Not configured Setup Delete
Output module that has been configured

Now you can continue to configure the other output modules one by one, following the procedure described on the previous pages.

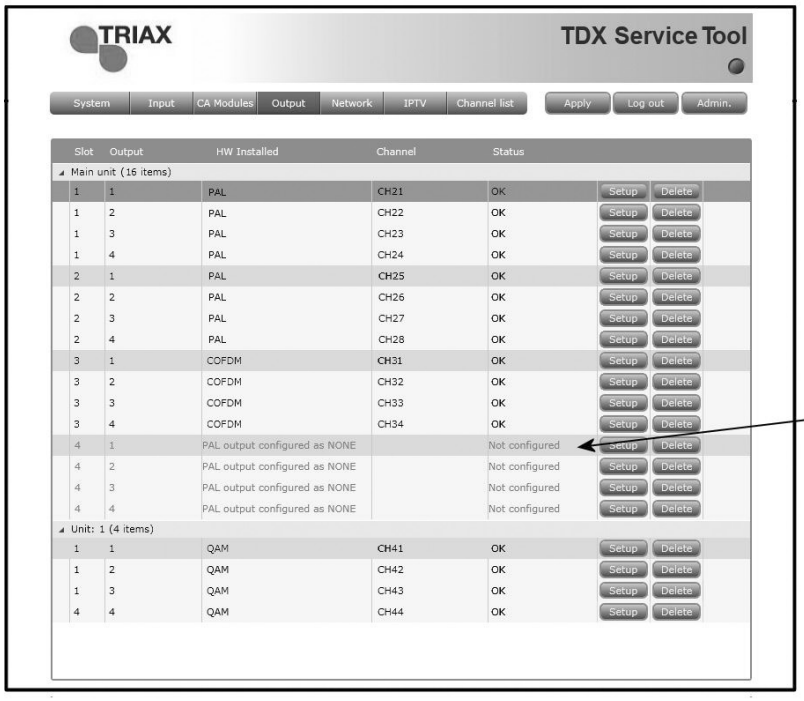
Delete setup

If you want to remove an output module and the associated configuration you can use the Delete button of the module in question in the Output window.

Click the Delete button of the PAL output module you want to remove.
A message window is displayed asking you to confirm that you want to remove the output module.



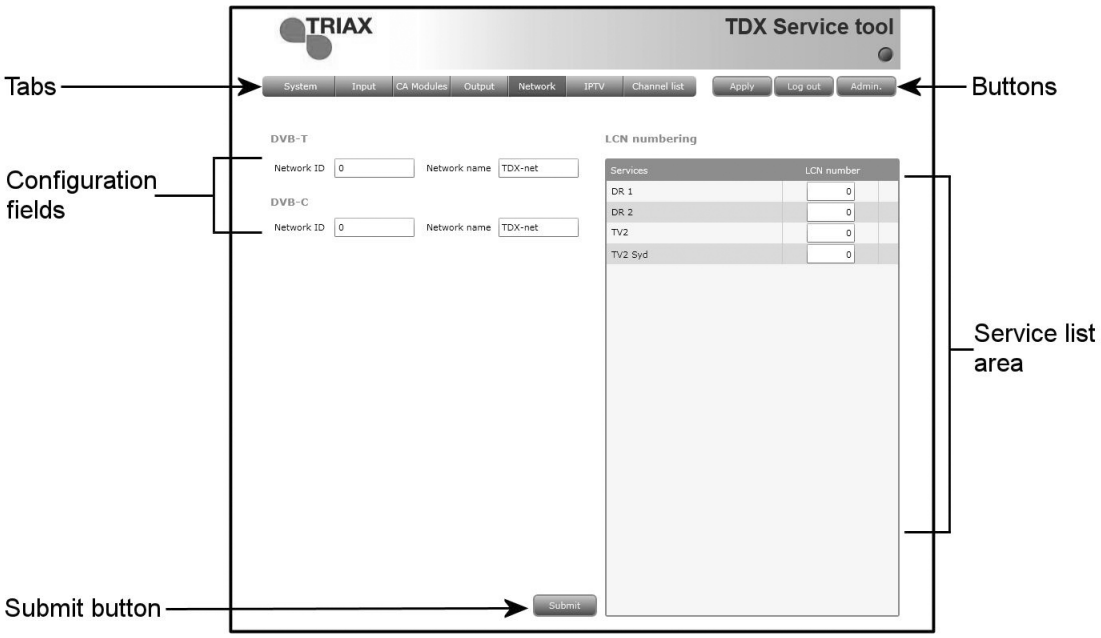
Until you have removed the output module physically from the headend unit the module list will display four lines with the writing in red.


TRIAX
TDX Service Tool
System
Input
CA Modules
Output
Network
IPTV
Channel list
Apply
Log out
Admin.
Slot Output HW Installed Channel Status
Main unit (16 items)
1 1 PAL CH21 OK Setup Delete
1 2 PAL CH22 OK Setup Delete
1 3 PAL CH23 OK Setup Delete
1 4 PAL CH24 OK Setup Delete
2 1 PAL CH25 OK Setup Delete
2 2 PAL CH26 OK Setup Delete
2 3 PAL CH27 OK Setup Delete
2 4 PAL CH28 OK Setup Delete
3 1 COFDM CH31 OK Setup Delete
3 2 COFDM CH32 OK Setup Delete
3 3 COFDM CH33 OK Setup Delete
3 4 COFDM CH34 OK Setup Delete
4 1 PAL output configured as NONE Not configured Setup Delete
4 2 PAL output configured as NONE Not configured Setup Delete
4 3 PAL output configured as NONE Not configured Setup Delete
4 4 PAL output configured as NONE Not configured Setup Delete
Unit: 1 (4 items)
1 1 QAM CH41 OK Setup Delete
1 2 QAM CH42 OK Setup Delete
1 3 QAM CH43 OK Setup Delete
4 4 QAM CH44 OK Setup Delete
The configuration has been deleted

Network window

Click the Network tab in the TDX Service Tool to display the Network window.

The first time you display the Network window the fields in the window will display a default value. The service list area will display all the digital services you have configured to output using the Output tab.



End-users may need the network ID if they have to make a NIT (Network Information Table) search when searching for services on their televisions or set-top boxes.

You have to state network ID's and names for both DVB-T and DVB-C.

Network ID Enter the required network ID in the Network ID field.

If it is an open network, the network ID has to follow the "ETSI TR 101 211" guidelines. If it a closed network you can determine the ID yourself.

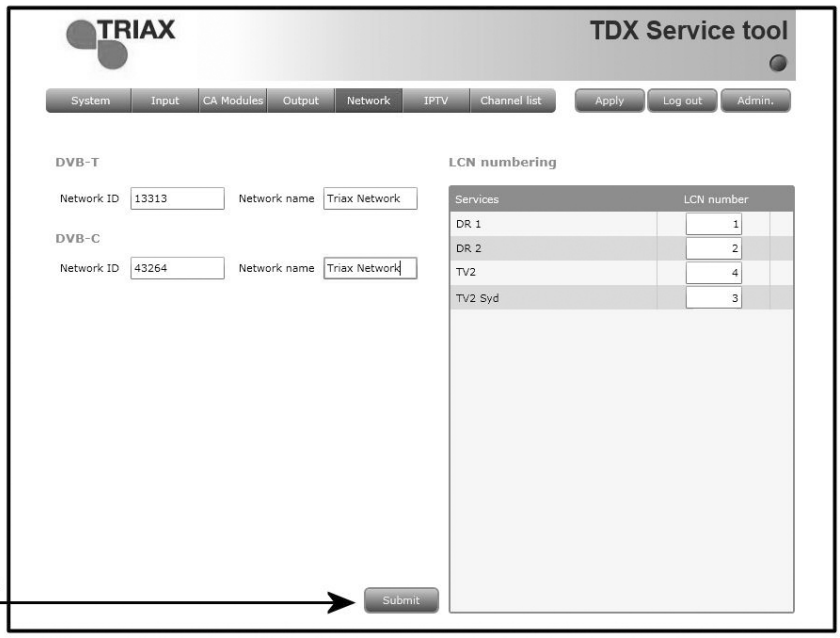
Network name Enter a network name in the Network name field. The maximum number of characters you can enter in the field is 255.

In the service list area you determine the numerical output order of the digital services on the television or set-top box of the end-user.

LCN number Enter the desired number in the LCN number field to the right of each service in the service list area.

Note You cannot give the same LCN number to more services.

When you have inserted the values you require you have to click the Submit button to enter this information in to the headend system.



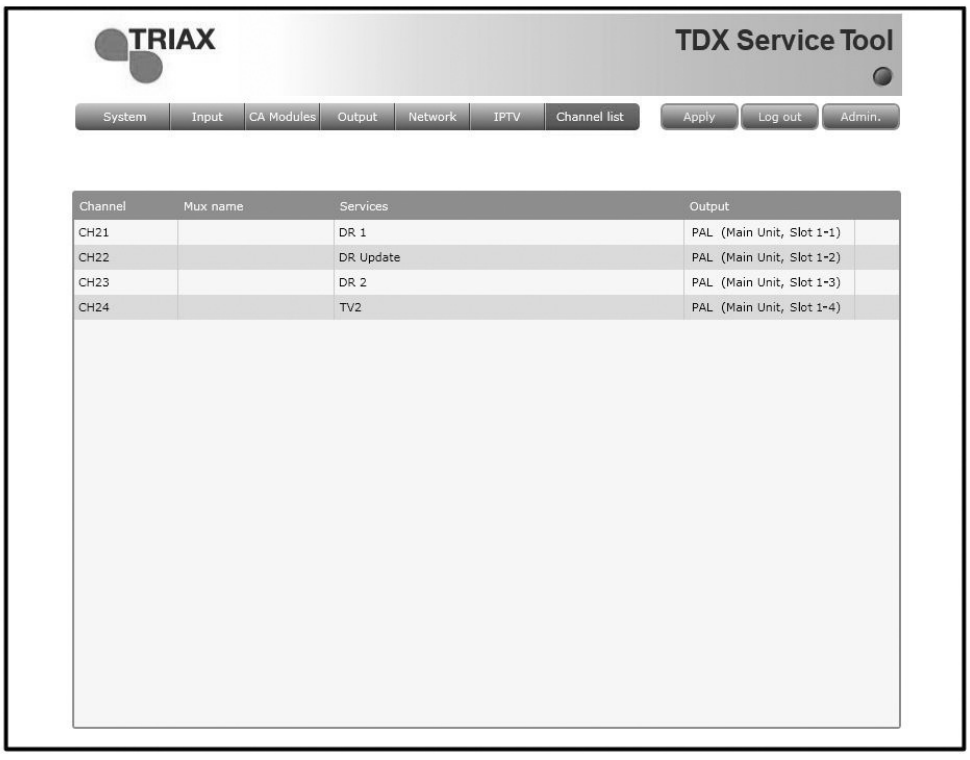
Click the Submit button to enter the information

Remember to click the Apply button in the upper right-hand corner from time to time to save new settings.

Channel list

Click the Channel list tab in the TDX Service Tool to display the Channel list window.

When you have finished configuring all the output modules you have inserted in to the headend units the Channel list tab displays a list with all the channels and services that you have selected.



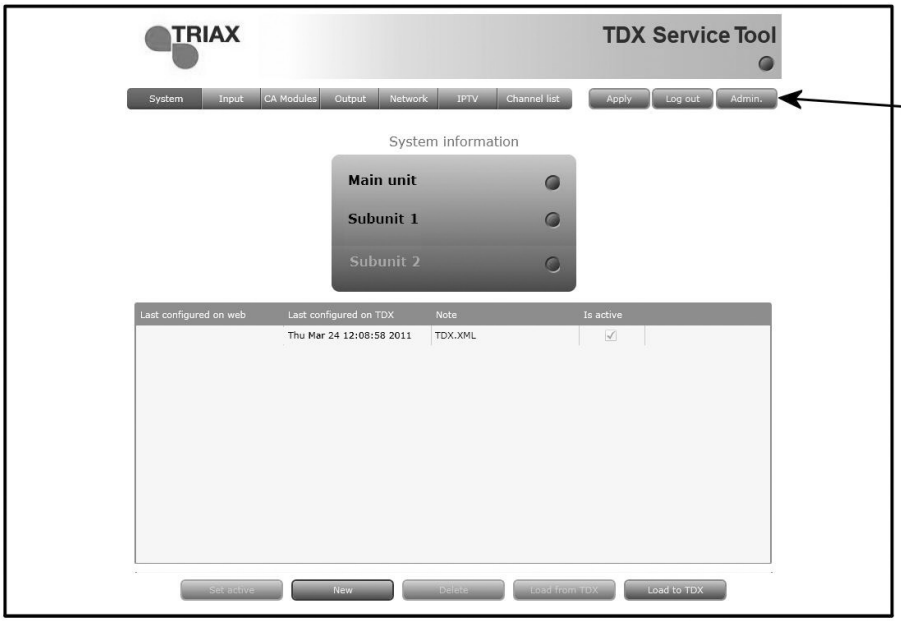
Log file

You can save a log file that lists actions that have occurred in the TDX headend system. This may be useful in case of problems with your TDX headend system.

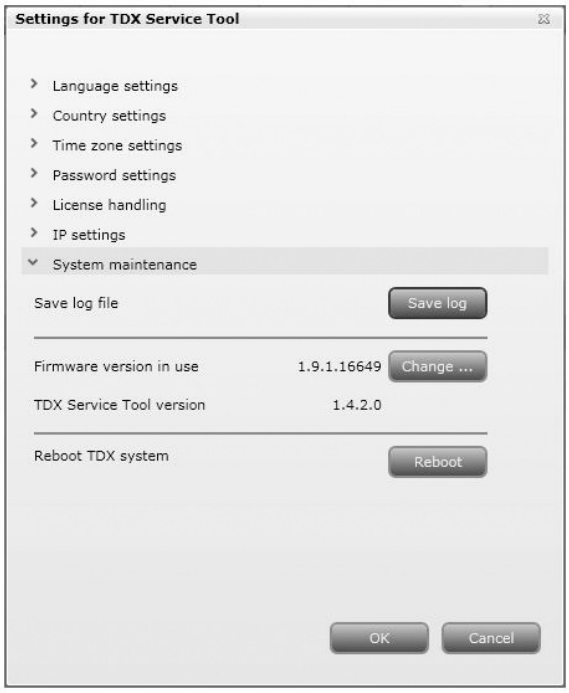
The size of the log file will be adequate for listing all actions that have occurred in the system for a couple weeks.

To save a log file on your computer/laptop you have to open the Administration window.

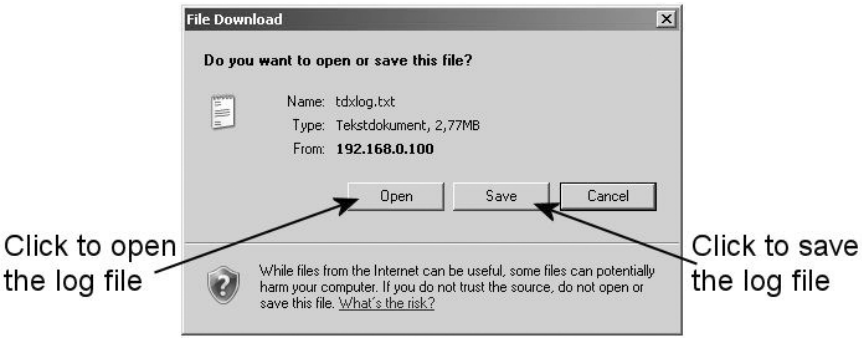
Click the Admin. button in the top right-hand corner of the TDX Service Tool window to open the Administration window.



To enter the System maintenance area, click the arrow bracket to the left of System maintenance.

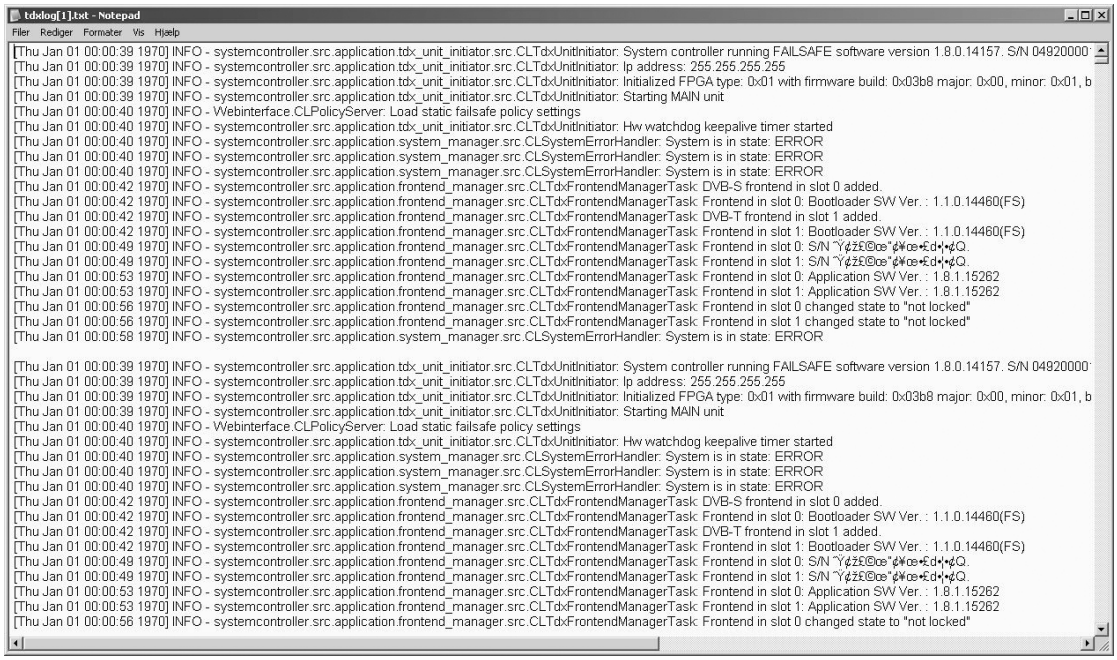


In the System maintenance area click the Save log button to open the File Download window.


File Download
Do you want to open or save this file?
Name: tdxlog.txt
Type: Tekstdokument, 2,77MB
From: 192.168.0.100
Open
Save
Cancel
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?
Click to open the log file
Click to save the log file

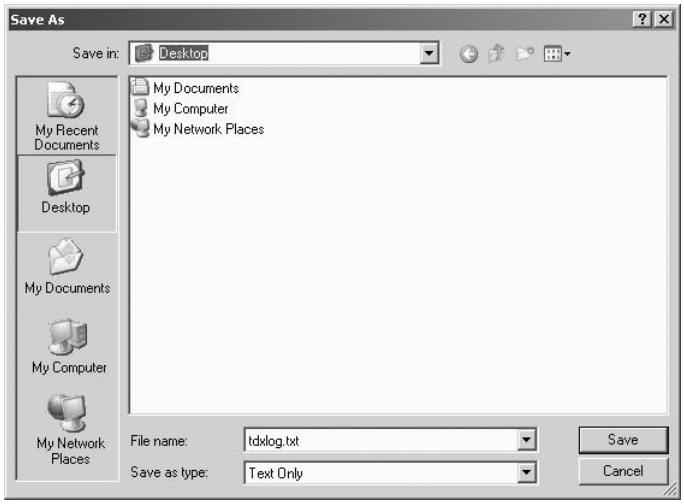
In the File Download window you can either open the log file or save the file to your laptop/computer.

If you want to open the log file click the Open button in the File Download window.

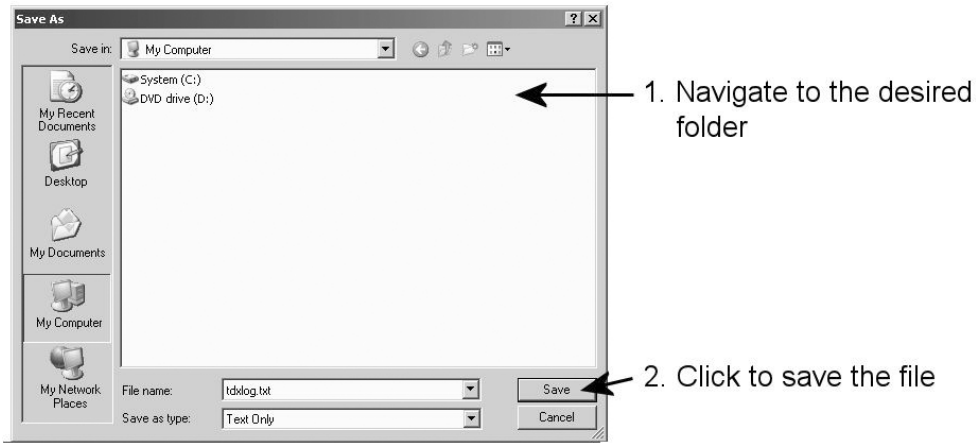


In case you need to save the log after having looked at the file in the Notepad window you can use the Save as command in the File menu of the Notepad window.

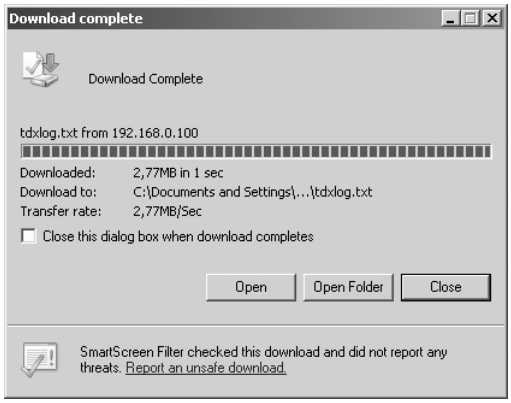
If you only want to save the log file when you open the File Download window, click the Save button to open the Save as window.



Navigate to the folder where you want to place the log file
Click the Save button to save the file.



Clicking the Save button displays the Download window.


Download complete
Download Complete
tdxlog.txt from 192.168.0.100
Downloaded: 2,77MB in 1 sec
Download to: C:\Documents and Settings\...\tdxlog.txt
Transfer rate: 2,77MB/Sec
Close this dialog box when download completes
Open
Open Folder
Close
SmartScreen Filter checked this download and did not report any threats. Report an unsafe download.

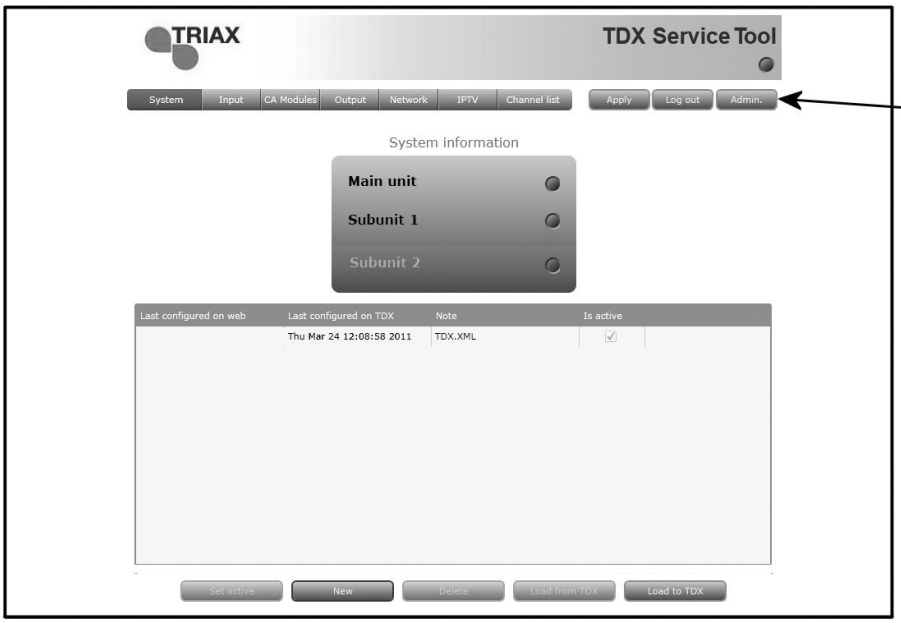
When the log file has been downloaded and saved, you can open the log file, open the folder where you have saved the log file or just close the window.

When you close the Download window you return automatically to the Administration window. Close this window by clicking the OK or Cancel button.

Update firmware

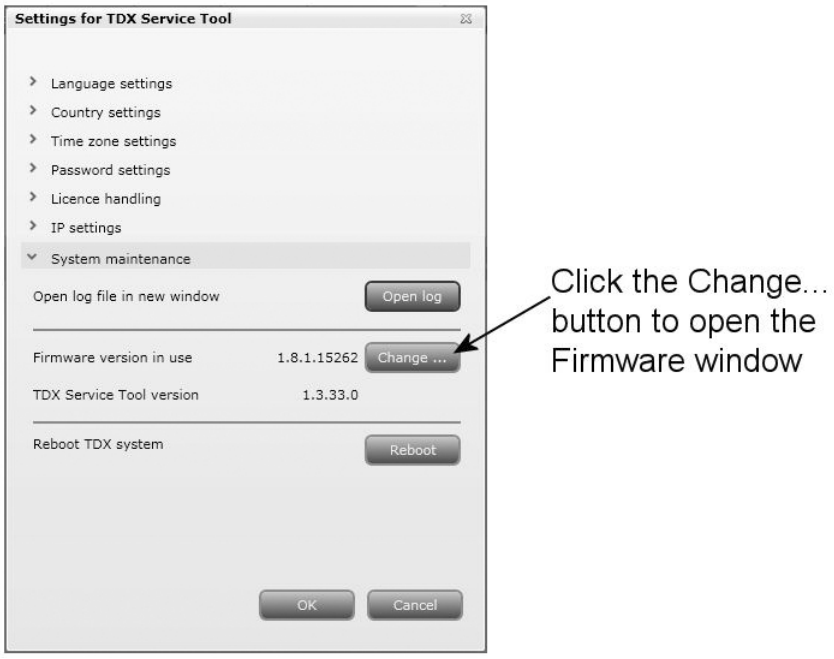
When firmware updates for your TDX system is available on the Triax home page, www.Triax.com, you can download these updates to your computer and then upload the updates to your TDX system using the Administration window.

Click the Admin. button in the top right-hand corner of the TDX Service Tool window to open the Administration window.

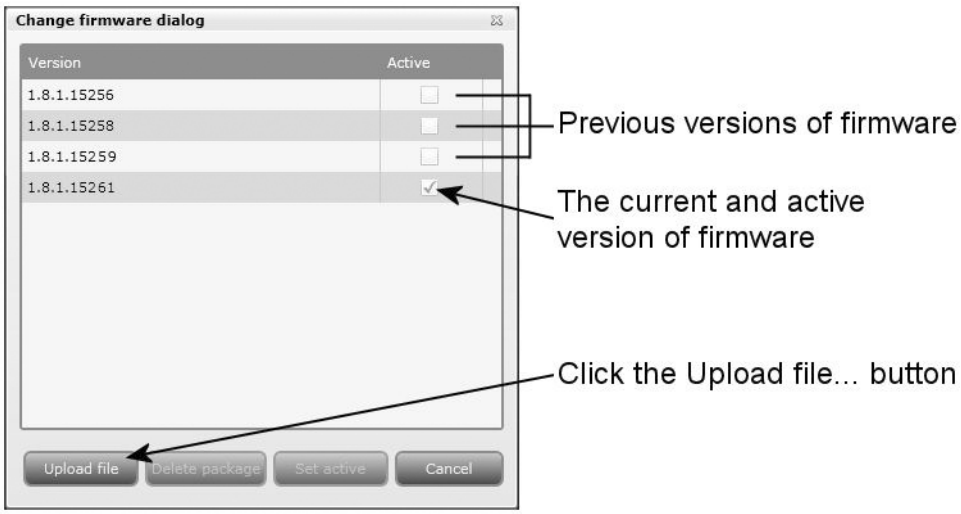


To enter the System maintenance area, click the arrow bracket to the left of System maintenance.

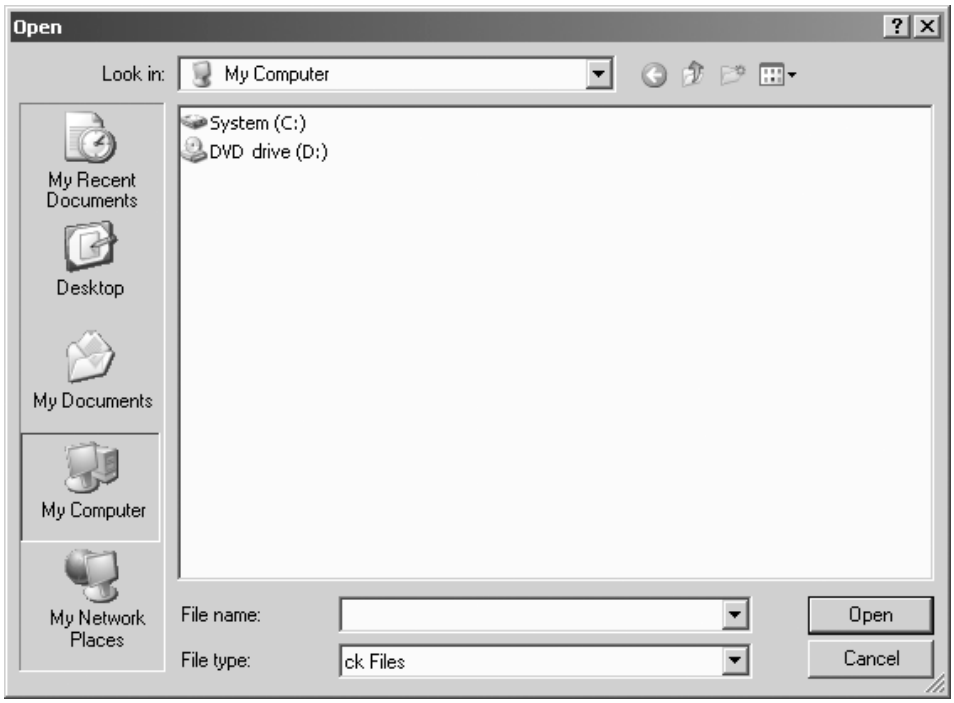
Click the Change... button to the right of the version number of the current firmware to open the Firmware window.



The Firmware window lists the current version of your TDX firmware as well as previous versions of the firmware.

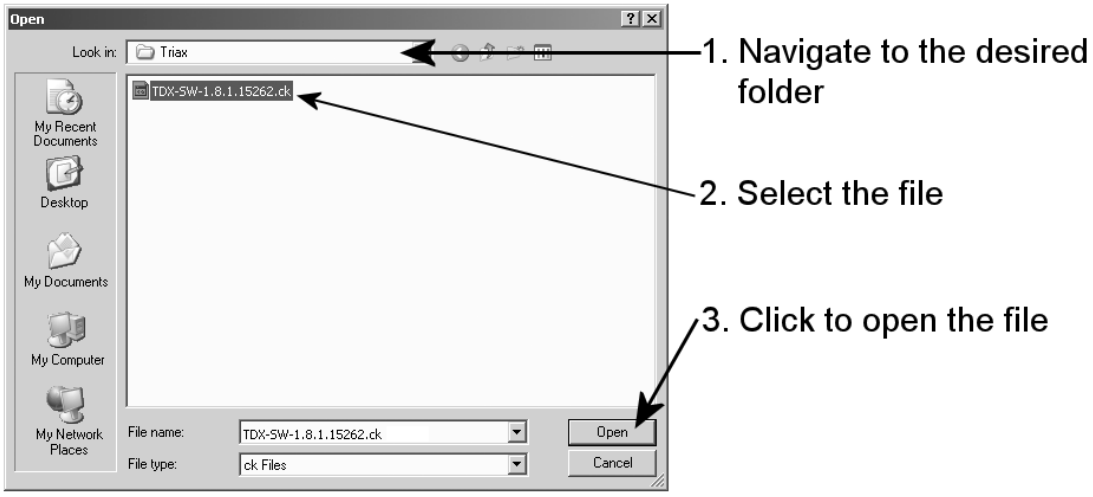


Click the Upload file... button to display the Open window.



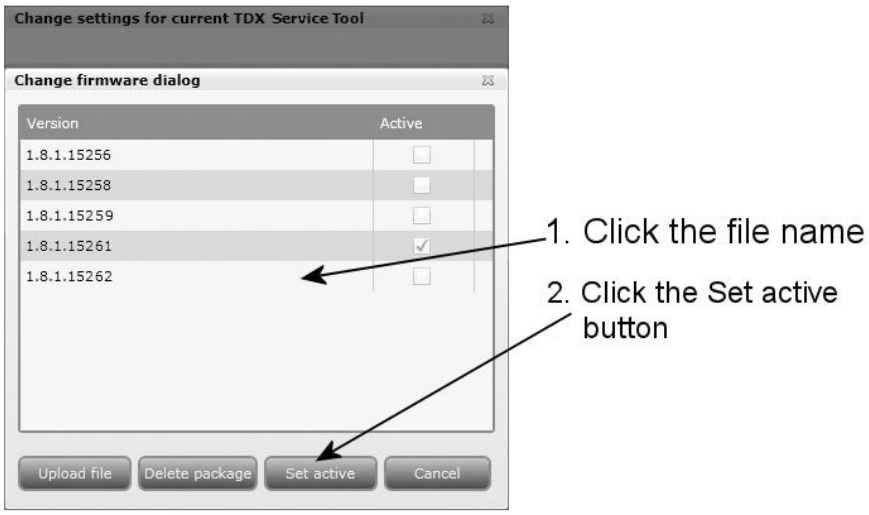
In the Open window navigate to the folder where you saved the update file when you downloaded it from the Triax home page.
Select the file.

Click the Open button to include the file in the list in the Firmware window



When you have clicked the Open button you return to the Firmware window. In the Firmware window the new update file is placed at the bottom of the list of updates.

Click the file name to select the file and then click the Set active button to transfer the update to the TDX system.



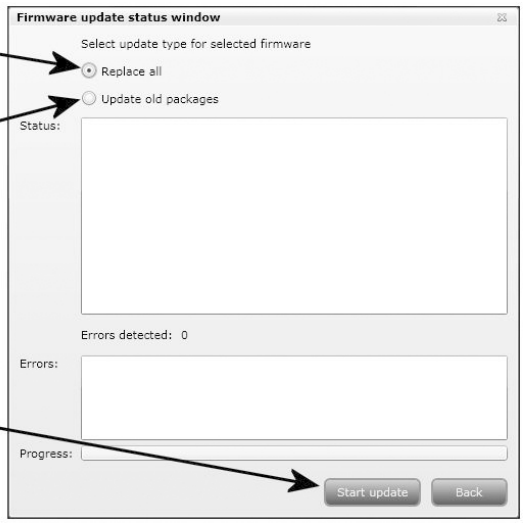
Clicking the Set active button displays the Firmware update window. In this window you select whether you want to update all firmware, i.e. modules, system controller and user interface, or only firmware that is in need of an update.

Triax recommend that you use the Replace all option when you want to update your firmware.

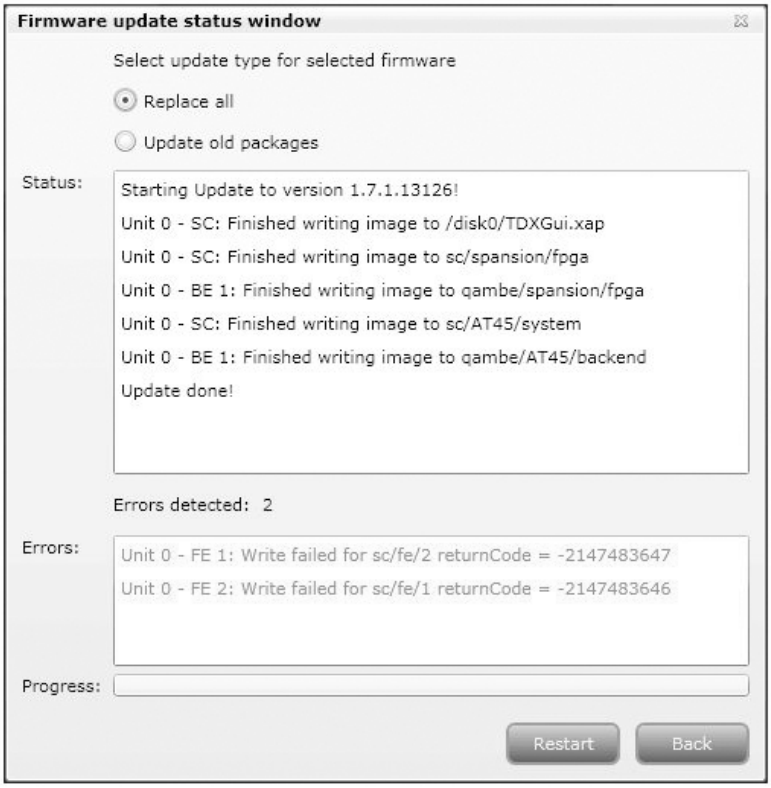
You should only use Update old packages if your TDX headend system consists mainly of new modules and a few older modules that might benefit from an update.

1. Click to update all firmware
   or
   click to update only firmware that needs updating

2. Click the Start update button to start updating

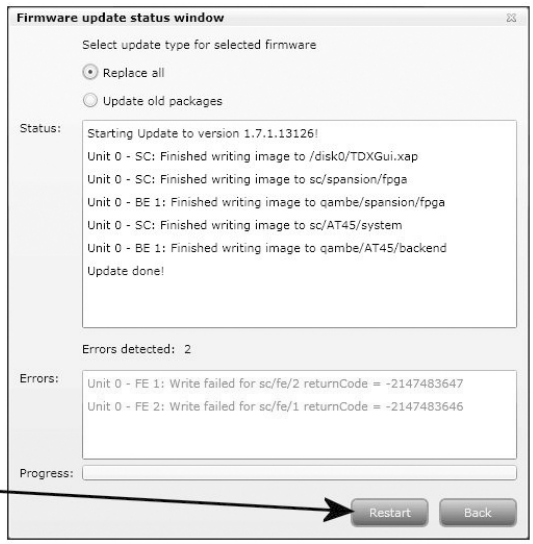


When updating the firmware, the Firmware update status window will display information about status and errors as well as the progress of the update itself. An update will take approximately 5 minutes.


Firmware update status window
Select update type for selected firmware
Replace all
Update old packages
Status:
Starting Update to version 1.7.1.13126!
Unit 0 - SC: Finished writing image to /disk0/TDXGui.xap
Unit 0 - SC: Finished writing image to sc/spansion/fpga
Unit 0 - BE 1: Finished writing image to qambe/spansion/fpga
Unit 0 - SC: Finished writing image to sc/AT45/system
Unit 0 - BE 1: Finished writing image to qambe/AT45/backend
Update done!
Errors detected: 2
Errors:
Unit 0 - FE 1: Write failed for sc/fe/2 returnCode = -2147483647
Unit 0 - FE 2: Write failed for sc/fe/1 returnCode = -2147483646
Progress:
Restart
Back

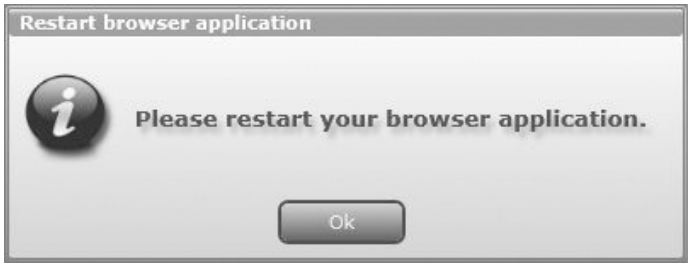
When you have finished updating the firmware you have to reboot the system by clicking the Restart button in order to make the update effective.

Important When rebooting the TDX headend system the distribution of services to all your end-users will be interrupted for a very short time.


Firmware update status window
Select update type for selected firmware
Replace all
Update old packages
Status:
Starting Update to version 1.7.1.13126!
Unit 0 - SC: Finished writing image to /disk0/TDXGui.xap
Unit 0 - SC: Finished writing image to sc/spansion/fpga
Unit 0 - BE 1: Finished writing image to qambe/spansion/fpga
Unit 0 - SC: Finished writing image to sc/AT45/system
Unit 0 - BE 1: Finished writing image to qambe/AT45/backend
Update done!
Errors detected: 2
Errors:
Unit 0 - FE 1: Write failed for sc/fe/2 returnCode = -2147483647
Unit 0 - FE 2: Write failed for sc/fe/1 returnCode = -2147483646
Progress:
Restart
Back

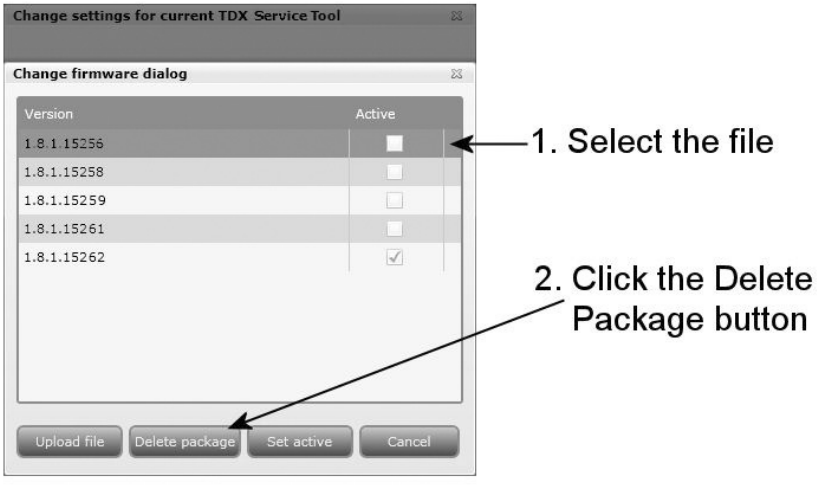
Click the Restart button to reboot the headend system

When you have rebooted the TDX headend system, a message window is displayed asking you to restart your Internet browser.



When you have restarted your browser you have to log into the TDX Service Tool in case you need to make any changes.

If your list of firmware updates needs to be tidied you can remove one or more of the previous firmware updates listed in the Change firmware window. Select the firmware update and click the Delete package button.



The firmware update is removed from the list.

Reboot system

If you need to switch the TDX headend system off and then immediately start it again you can use the Reboot button in the System maintenance area of the administration window.

Click the Reboot button to reboot the TDX headend system.

Note You can also reboot the TDX headend system by switching off the power manually.

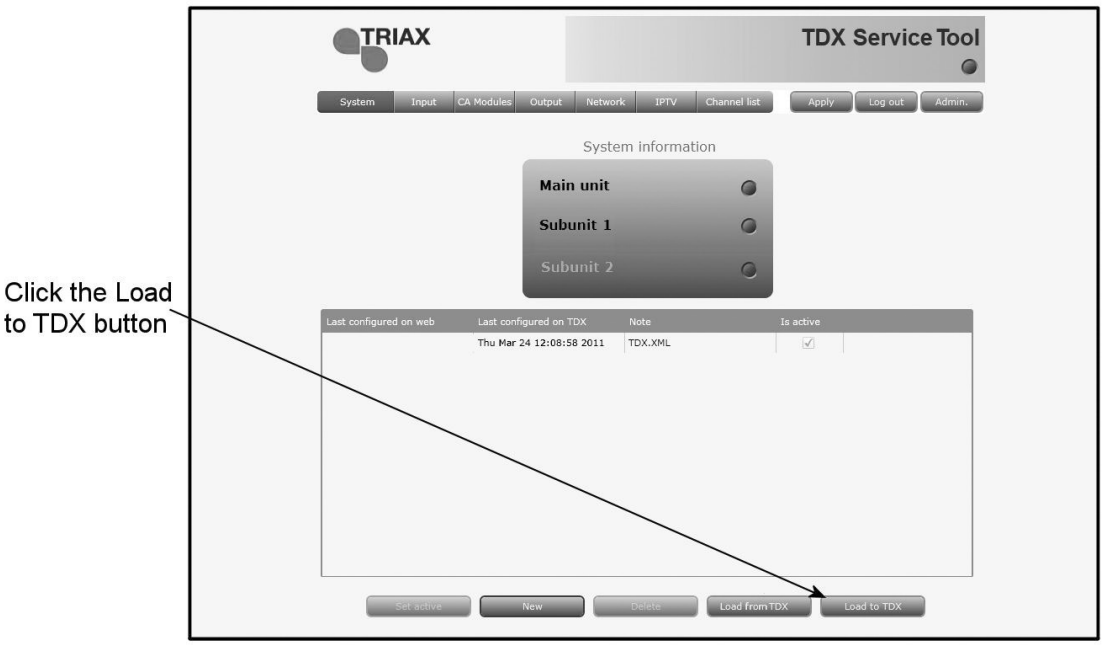
Important When rebooting the TDX headend system or switching off the power the distribution of services to all your end-users will be interrupted.

When the TDX system has been rebooted, you close the Administration window and restart your Internet browser.

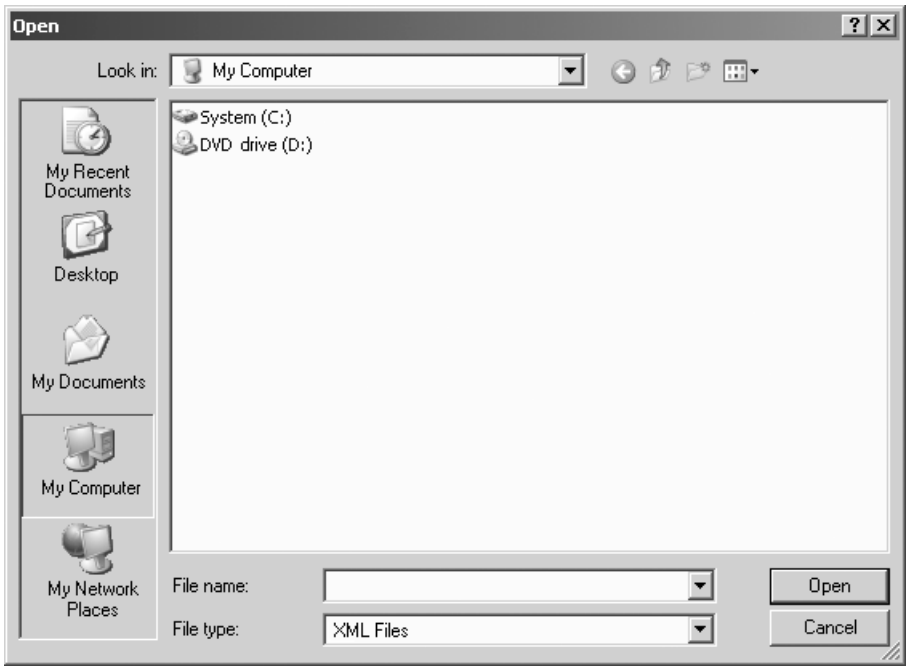
When you have restarted your browser you have to log into the TDX Service Tool if you need to make further changes.

Load to TDX

In case you want to load a configuration file made using the TDX Configurator from your computer/laptop to your TDX system you have to use the Load to TDX button on the System tab.

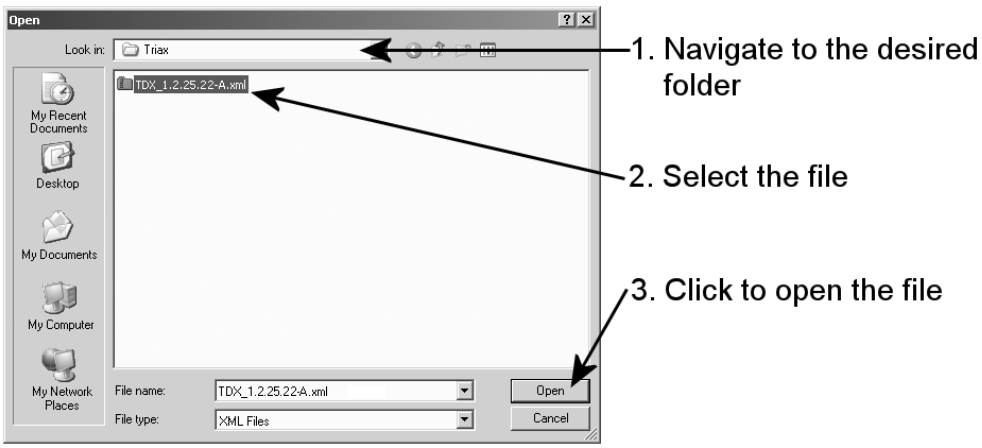


Click the Load to TDX button at the bottom of the System tab to display the Open window.



In the Open window navigate to the folder where you saved the configuration file from the TDX Configurator.

Select the file, then click the Open button to include the file in the configuration list on the System tab.



The configuration file will now be listed in the configuration list area.

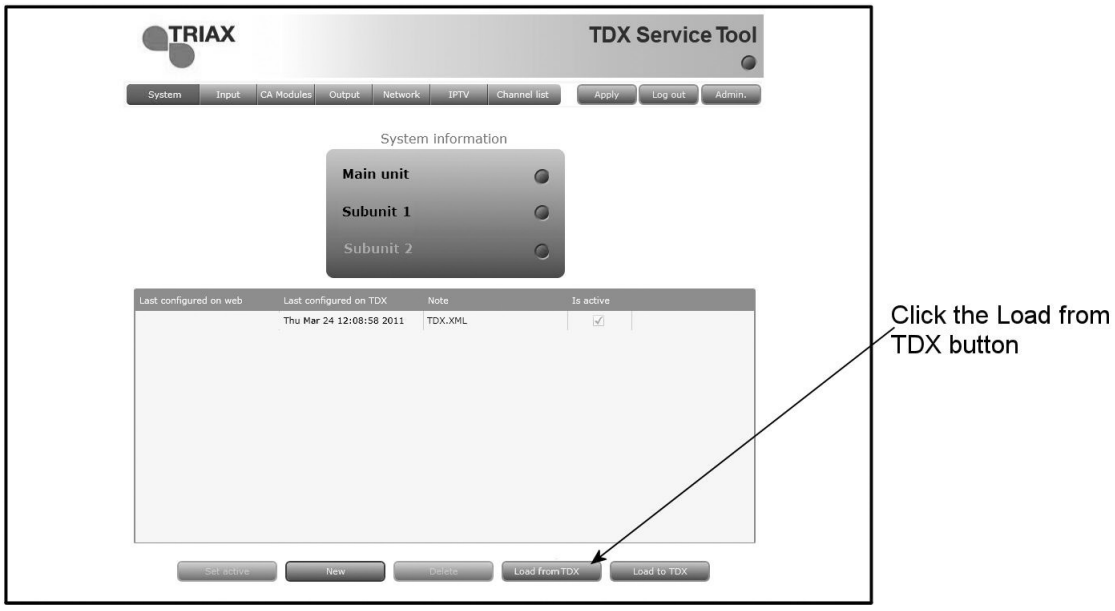
If the name of the new configuration file is identical to the existing configuration file a number in brackets will be added to the name of the new file.

Load from TDX

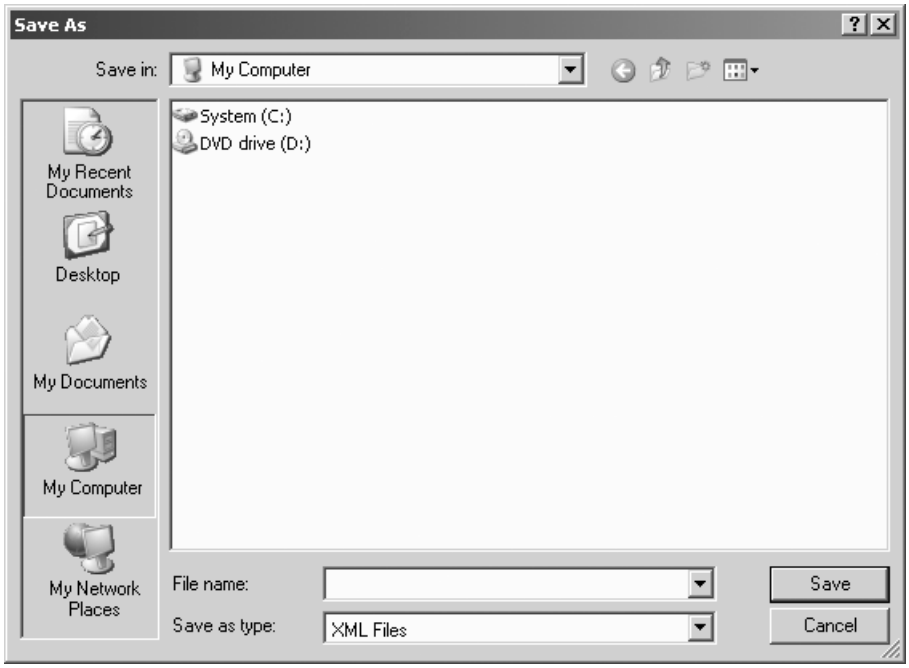
You can save a configuration file from your TDX headend system to your computer/laptop in case you want to use it in another TDX headend system that is identical to the one from which you want to save the configuration file.

If, however, you load a configuration file into a dissimilar TDX system you will have to reconfigure all those modules that deviate from what is specified in the configuration file. All deviating modules will be marked in red.

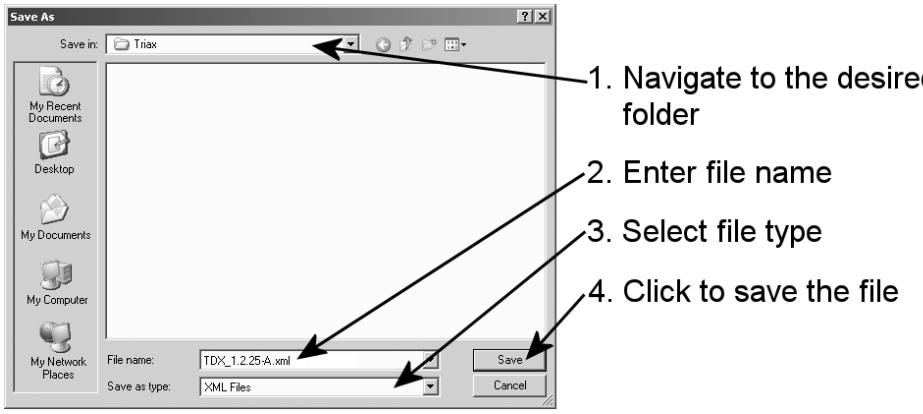
To save a configuration file on your computer/laptop you have to use the Load from TDX button on the System tab.



Click the Load from TDX button at the bottom of the System tab to display the Save As window.



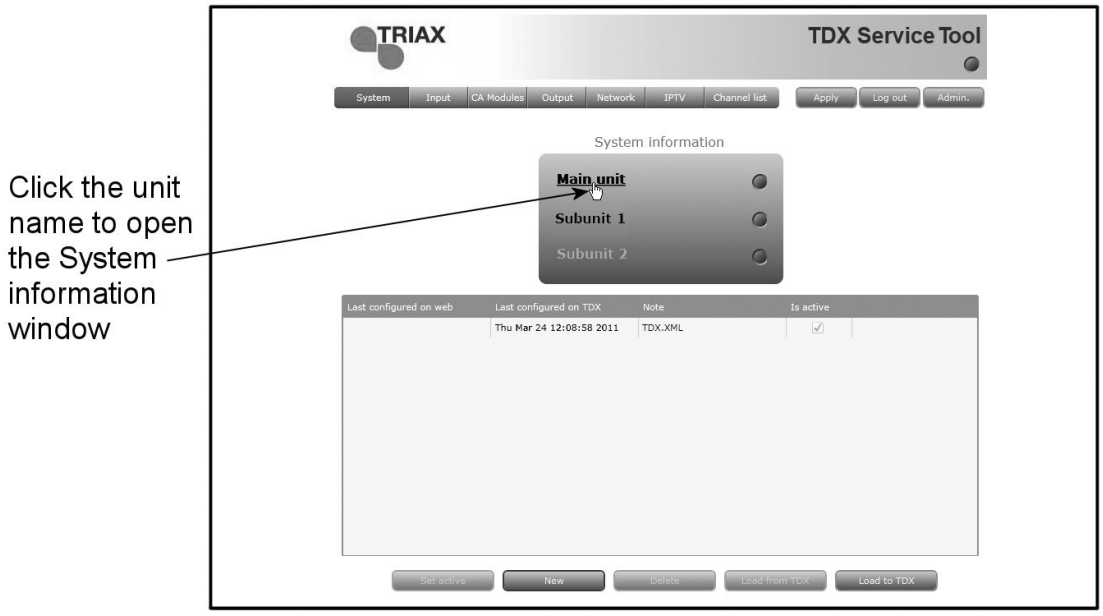
Navigate to the folder where you want to save the configuration file.
Enter the name of the configuration file in the File name field.
Select file type in the File type field.
Click the Save button to save the file.



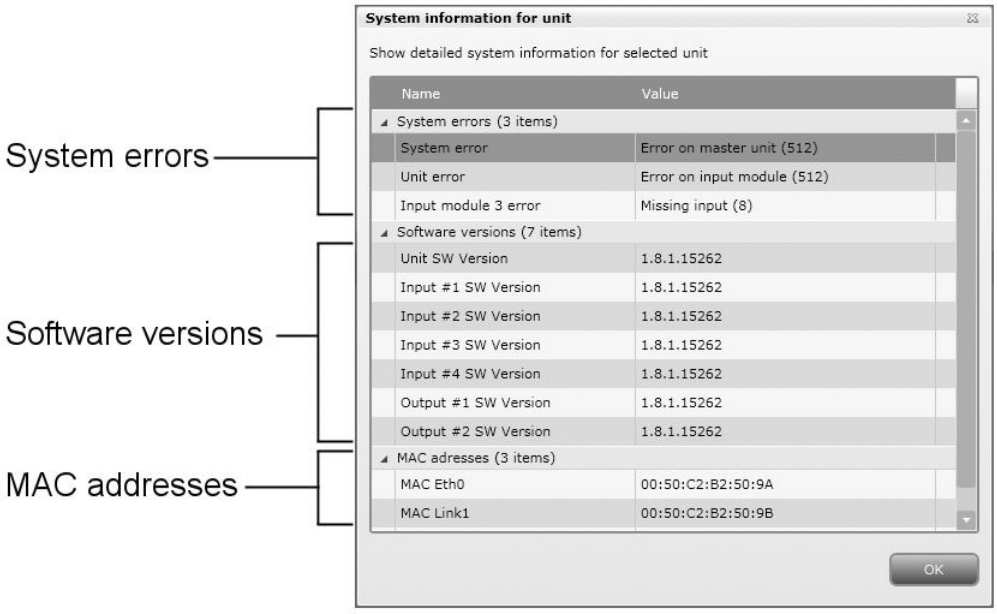
You return automatically to the System tab when you have saved the configuration file.

System information

To get detailed information about the individual units you can click the unit in question in the System information list and open the System information window.



In the System information window you get information about system errors, which software version each of the input and output modules uses and the MAC addresses.



In connection with errors in your TDX headend system you can use the System information window as starting point for locating the errors.

Your notes

Your notes

Your notes

TRIAX

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